

**Table 26:** APN Power Permutations and Its Inverses for odd  $n$  and  $3 \leq n \leq 129$

$n$	$F$	$F$ 's Family	$F^{-1}$	$F^{-1}$ 's Family
3	$x^3$	Gold ( $i = 1$ ), Welch, Niho, Inverse	$x^{3 \cdot 2^2}$	Gold
5	$x^3$ $x^5$ $x^{15}$	Gold ( $i = 1$ ) Gold ( $i = 2$ ), Niho Inverse, Dobbertin	$x^{13 \cdot 2^2}$ $x^{7 \cdot 2^3}$ $x^{15 \cdot 2^2}$	Kasami ( $i = 2$ ) Welch
7	$x^3$ $x^5$ $x^9$ $x^{13}$ $x^{57}$ $x^{63}$	Gold ( $i = 1$ ) Gold ( $i = 2$ ) Gold ( $i = 3$ ) Kasami ( $i = 2$ ) Kasami ( $i = 3$ ) Inverse	$x^{43 \cdot 2^6}$ $x^{27 \cdot 2^4}$ $x^{15 \cdot 2^4}$ $x^{11 \cdot 2^3}$ $x^{39 \cdot 2}$ $x^{63 \cdot 2^2}$	Welch Niho
9	$x^3$ $x^5$ $x^{17}$ $x^{13}$ $x^{241}$ $x^{19}$ $x^{255}$	Gold ( $i = 1$ ) Gold ( $i = 2$ ) Gold ( $i = 4$ ) Kasami ( $i = 2$ ) Kasami ( $i = 4$ ) Welch, Niho Inverse	$x^{171 \cdot 2^8}$ $x^{103 \cdot 2^7}$ $x^{31 \cdot 2^5}$ $x^{59 \cdot 2}$ $x^{87 \cdot 2^5}$ $x^{27 \cdot 2^8}$ $x^{255 \cdot 2^2}$	
11	$x^3$ $x^5$ $x^9$ $x^{17}$ $x^{33}$ $x^{13}$ $x^{57}$ $x^{241}$ $x^{993}$ $x^{35}$ $x^{287}$ $x^{1023}$	Gold ( $i = 1$ ) Gold ( $i = 2$ ) Gold ( $i = 3$ ) Gold ( $i = 4$ ) Gold ( $i = 5$ ) Kasami ( $i = 2$ ) Kasami ( $i = 3$ ) Kasami ( $i = 4$ ) Kasami ( $i = 5$ ) Welch Niho Inverse	$x^{683 \cdot 2^{10}}$ $x^{411 \cdot 2^8}$ $x^{231 \cdot 2^6}$ $x^{365 \cdot 2^5}$ $x^{63 \cdot 2^6}$ $x^{315}$ $x^{413 \cdot 2}$ $x^{43 \cdot 2^4}$ $x^{151 \cdot 2^2}$ $x^{117}$ $x^{107 \cdot 2^9}$ $x^{1023 \cdot 2^2}$	
13	$x^3$ $x^5$ $x^9$ $x^{17}$ $x^{33}$	Gold ( $i = 1$ ) Gold ( $i = 2$ ) Gold ( $i = 3$ ) Gold ( $i = 4$ ) Gold ( $i = 5$ )	$x^{2731 \cdot 2^{12}}$ $x^{1639 \cdot 2^{11}}$ $x^{911 \cdot 2^{10}}$ $x^{1453 \cdot 2^6}$ $x^{1243 \cdot 2^7}$	

**Table 26:** *(continued)*

$n$	$F$	$F$ 's Family	$F^{-1}$
13	$x^{65}$	Gold ( $i = 6$ )	$x^{127 \cdot 2^7}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{635 \cdot 2^7}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{723 \cdot 2^5}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{171 \cdot 2^5}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{1691 \cdot 2^{10}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{1245 \cdot 2^{12}}$
	$x^{67}$	Welch	$x^{367 \cdot 2^9}$
	$x^{71}$	Niho	$x^{347 \cdot 2^7}$
	$x^{4095}$	Inverse	$x^{4095 \cdot 2^2}$
15	$x^3$	Gold ( $i = 1$ )	$x^{10923 \cdot 2^{14}}$
	$x^5$	Gold ( $i = 2$ )	$x^{6555 \cdot 2^{12}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{1935 \cdot 2^8}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{255 \cdot 2^8}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{2523 \cdot 2^{10}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{3671 \cdot 2^{14}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{4791 \cdot 2^8}$
	$x^{131}$	Welch	$x^{4815 \cdot 2^2}$
	$x^{2175}$	Niho	$x^{1371 \cdot 2^8}$
	$x^{16383}$	Inverse	$x^{16383 \cdot 2^2}$
	$x^{4679}$	Dobbertin	$x^{5851 \cdot 2}$
17	$x^3$	Gold ( $i = 1$ )	$x^{43691 \cdot 2^{16}}$
	$x^5$	Gold ( $i = 2$ )	$x^{26215 \cdot 2^{15}}$
	$x^9$	Gold ( $i = 3$ )	$x^{14567 \cdot 2^{12}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{7711 \cdot 2^{13}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{19867 \cdot 2^9}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{22197 \cdot 2^7}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{19309 \cdot 2^8}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{511 \cdot 2^9}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{10083 \cdot 2^{14}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{4599}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{20123 \cdot 2^{13}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{26267 \cdot 2^{16}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{683 \cdot 2^6}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{23373 \cdot 2^{12}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
17	$x^{65281}$	Kasami ( $i = 8$ )	$x^{9399 \cdot 2^2}$
	$x^{259}$	Welch	$x^{7591 \cdot 2^{15}}$
	$x^{271}$	Niho	$x^{1451 \cdot 2^{14}}$
	$x^{65535}$	Inverse	$x^{65535 \cdot 2^2}$
19	$x^3$	Gold ( $i = 1$ )	$x^{174763 \cdot 2^{18}}$
	$x^5$	Gold ( $i = 2$ )	$x^{104859 \cdot 2^{16}}$
	$x^9$	Gold ( $i = 3$ )	$x^{58255 \cdot 2^{16}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{92525 \cdot 2^{13}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{15903 \cdot 2^{10}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{88757 \cdot 2^8}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{52851 \cdot 2^8}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{75483 \cdot 2^{10}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{1023 \cdot 2^{10}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{40331 \cdot 2^{15}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{9207 \cdot 2^{10}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{77229 \cdot 2}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{38551 \cdot 2^6}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{2731 \cdot 2^7}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{104909 \cdot 2^{18}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{79453 \cdot 2^{18}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{75485 \cdot 2^{18}}$
	$x^{515}$	Welch	$x^{31563 \cdot 2^8}$
	$x^{16895}$	Niho	$x^{5803 \cdot 2^{15}}$
	$x^{262143}$	Inverse	$x^{262143 \cdot 2^2}$
21	$x^3$	Gold ( $i = 1$ )	$x^{699051 \cdot 2^{20}}$
	$x^5$	Gold ( $i = 2$ )	$x^{419431 \cdot 2^{19}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{370093 \cdot 2^{14}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{63551 \cdot 2^{16}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{204007 \cdot 2^{11}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{2047 \cdot 2^{11}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{161339 \cdot 2^{13}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{339373 \cdot 2^{19}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{225977 \cdot 2^{19}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{233131 \cdot 2^{19}}$

**Table 26:** *(continued)*

$n$	$F$	$F$ 's Family	$F^{-1}$
21	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{300471 \cdot 2^{11}}$
	$x^{1027}$	Welch	$x^{169615 \cdot 2^4}$
	$x^{1055}$	Niho	$x^{21867 \cdot 2^{11}}$
	$x^{1048575}$	Inverse	$x^{1048575 \cdot 2^2}$
23	$x^3$	Gold ( $i = 1$ )	$x^{2796203 \cdot 2^{22}}$
	$x^5$	Gold ( $i = 2$ )	$x^{1677723 \cdot 2^{20}}$
	$x^9$	Gold ( $i = 3$ )	$x^{932071 \cdot 2^{18}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{493455 \cdot 2^{16}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{1271003 \cdot 2^{17}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{129087 \cdot 2^{12}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{845427 \cdot 2^{10}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{1403605 \cdot 2^9}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{1357229 \cdot 2^{11}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{1203053 \cdot 2^{11}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{4095 \cdot 2^{12}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{645435 \cdot 2^{12}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{735843 \cdot 2^{19}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{69615}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{363253 \cdot 2^{16}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{1271005 \cdot 2^4}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{1677773 \cdot 2}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{10923 \cdot 2^8}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{1484205 \cdot 2^{16}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{1268077 \cdot 2^{11}}$
$x^{4192257}$	Kasami ( $i = 11$ )	$x^{599479 \cdot 2^2}$	
$x^{2051}$	Welch	$x^{494893 \cdot 2^{11}}$	
$x^{133119}$	Niho	$x^{87403 \cdot 2^{12}}$	
$x^{4194303}$	Inverse	$x^{4194303 \cdot 2^2}$	
25	$x^3$	Gold ( $i = 1$ )	$x^{11184811 \cdot 2^{24}}$
	$x^5$	Gold ( $i = 2$ )	$x^{6710887 \cdot 2^{23}}$
	$x^9$	Gold ( $i = 3$ )	$x^{3728271 \cdot 2^{22}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{1973791 \cdot 2^{21}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{516223 \cdot 2^{19}}$
$x^{129}$	Gold ( $i = 7$ )	$x^{4942189 \cdot 2^{12}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
25	$x^{257}$	Gold ( $i = 8$ )	$x^{5614293 \cdot 2^{10}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{5036467 \cdot 2^{11}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{4798171 \cdot 2^{13}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{8191 \cdot 2^{13}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{2581115 \cdot 2^{19}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{2943443 \cdot 2^{13}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{139247 \cdot 2^{13}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{2471063 \cdot 2^8}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{5921613 \cdot 2^{24}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{43691 \cdot 2^9}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{6711707 \cdot 2^{22}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{1436437 \cdot 2^{20}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{4798173 \cdot 2^{24}}$
	$x^{4099}$	Welch	$x^{1727247 \cdot 2^{16}}$
	$x^{4159}$	Niho	$x^{88747 \cdot 2^{20}}$
	$x^{16777215}$	Inverse	$x^{16777215 \cdot 2^2}$
	$x^{1082399}$	Dobbertin	$x^{5682605 \cdot 2^1}$
27	$x^3$	Gold ( $i = 1$ )	$x^{44739243 \cdot 2^{26}}$
	$x^5$	Gold ( $i = 2$ )	$x^{26843547 \cdot 2^{24}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{23685485 \cdot 2^{21}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{20336027 \cdot 2^{19}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{1040511 \cdot 2^{14}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{13056231 \cdot 2^{14}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{7463879 \cdot 2^{11}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{21681845 \cdot 2^{12}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{16383 \cdot 2^{14}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{10324443 \cdot 2^{22}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{19492269 \cdot 2^{13}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{9664217 \cdot 2^1}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{14456249 \cdot 2^{23}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{14913195 \cdot 2^1}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{14914903 \cdot 2^{23}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{22729909 \cdot 2^{18}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{19180983 \cdot 2^{14}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
27	$x^{8195}$	Welch	$x^{7648527 \cdot 2^{19}}$
	$x^{1056767}$	Niho	$x^{354987 \cdot 2^{21}}$
	$x^{67108863}$	Inverse	$x^{67108863 \cdot 2^2}$
29	$x^3$	Gold ( $i = 1$ )	$x^{178956971 \cdot 2^{28}}$
	$x^5$	Gold ( $i = 2$ )	$x^{107374183 \cdot 2^{27}}$
	$x^9$	Gold ( $i = 3$ )	$x^{59652327 \cdot 2^{24}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{94741933 \cdot 2^{22}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{16268831 \cdot 2^{20}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{90855093 \cdot 2^{19}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{4161791 \cdot 2^{22}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{77292763 \cdot 2^{15}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{80583091 \cdot 2^{13}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{89566037 \cdot 2^{11}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{29607823 \cdot 2^{15}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{52022899 \cdot 2^{13}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{76733293 \cdot 2^{14}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{32767 \cdot 2^{15}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{41297763 \cdot 2^{26}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{47094227 \cdot 2^{15}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{77968813 \cdot 2^{18}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{1081311 \cdot 2^0}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{86727349 \cdot 2^1}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{77309147 \cdot 2^{22}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{81344093 \cdot 2^4}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{107375003 \cdot 2^{28}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{174763 \cdot 2^{10}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{31642323 \cdot 2^9}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{20825211 \cdot 2^{20}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{11032043 \cdot 2^4}$
$x^{268419073}$	Kasami ( $i = 14$ )	$x^{38350263 \cdot 2^2}$	
$x^{16387}$	Welch	$x^{23686927 \cdot 2^{17}}$	
$x^{16511}$	Niho	$x^{1398187 \cdot 2^{15}}$	
$x^{268435455}$	Inverse	$x^{268435455 \cdot 2^2}$	
31	$x^3$	Gold ( $i = 1$ )	$x^{715827883 \cdot 2^{30}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
31	$x^5$	Gold ( $i = 2$ )	$x^{429496731 \cdot 2^{28}}$
	$x^9$	Gold ( $i = 3$ )	$x^{238609295 \cdot 2^{28}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{126322575 \cdot 2^{24}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{65075263 \cdot 2^{26}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{363420341 \cdot 2^{20}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{316296045 \cdot 2^{22}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{8356095 \cdot 2^{16}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{347448749 \cdot 2^{15}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{358263637 \cdot 2^{12}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{214853427 \cdot 2^{12}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{321310107 \cdot 2^{16}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{207854823 \cdot 2^{16}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{306820827 \cdot 2^{16}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{65535 \cdot 2^{16}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{165191051 \cdot 2^{27}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{188375763 \cdot 2^{23}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{187125403 \cdot 2^{15}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{2162655 \cdot 2^{16}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{355162805 \cdot 2^{27}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{45044779 \cdot 2^{11}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{153986231 \cdot 2^9}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{378971565 \cdot 2^{28}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{699051 \cdot 2^{11}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{429497549 \cdot 2^{30}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{196242589 \cdot 2^6}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{75203835 \cdot 2^{29}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{323851981 \cdot 2^{13}}$
$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{306820829 \cdot 2^{30}}$	
$x^{32771}$	Welch	$x^{127062735 \cdot 2^{10}}$	
$x^{8421375}$	Niho	$x^{5592491 \cdot 2^{16}}$	
$x^{1073741823}$	Inverse	$x^{1073741823 \cdot 2^2}$	
33	$x^3$	Gold ( $i = 1$ )	$x^{2863311531 \cdot 2^{32}}$
	$x^5$	Gold ( $i = 2$ )	$x^{1717986919 \cdot 2^{31}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{505290271 \cdot 2^{29}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
33	$x^{33}$	Gold ( $i = 5$ )	$x^{1301505243 \cdot 2^{27}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{865652339 \cdot 2^{22}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{33423871 \cdot 2^{25}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{477684679 \cdot 2^{14}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{1420647093 \cdot 2^{15}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{1385608621 \cdot 2^{16}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{131071 \cdot 2^{17}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{660764219 \cdot 2^{25}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{891072087 \cdot 2^{20}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{614184665 \cdot 2^{19}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{723357351 \cdot 2^{26}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{920956361 \cdot 2^{28}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{954438999 \cdot 2^{32}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{1453939381 \cdot 2^{22}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{1389794741 \cdot 2^{30}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{1227189687 \cdot 2^{17}}$
	$x^{65539}$	Welch	$x^{497395471 \cdot 2^{23}}$
	$x^{65791}$	Niho	$x^{5614251 \cdot 2^{26}}$
	$x^{4294967295}$	Inverse	$x^{4294967295 \cdot 2^2}$
	35	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{6871947675 \cdot 2^{32}}$
$x^9$		Gold ( $i = 3$ )	$x^{3817748711 \cdot 2^{30}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{6063483245 \cdot 2^{29}}$
$x^{65}$		Gold ( $i = 6$ )	$x^{528611391 \cdot 2^{24}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{4946732763 \cdot 2^{26}}$
$x^{513}$		Gold ( $i = 9$ )	$x^{66978303 \cdot 2^{18}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{3437651763 \cdot 2^{14}}$
$x^{4097}$		Gold ( $i = 12$ )	$x^{5728021845 \cdot 2^{13}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{1010704143 \cdot 2^{14}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{4908833645 \cdot 2^{17}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{262143 \cdot 2^{18}}$
$x^{13}$		Kasami ( $i = 2$ )	$x^{2643056955 \cdot 2^{24}}$
$x^{57}$		Kasami ( $i = 3$ )	$x^{602804727 \cdot 2^{18}}$
$x^{241}$		Kasami ( $i = 4$ )	$x^{712857643 \cdot 2^{28}}$



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
35	$x^{4033}$	Kasami ( $i = 6$ )	$x^{17039295 \cdot 2^0}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{5148092109 \cdot 2^{34}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{4946732765 \cdot 2^7}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{6871948493 \cdot 2^1}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{2796203 \cdot 2^{12}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{2023134871 \cdot 2^{10}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{5179333453 \cdot 2^{30}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{2454285751 \cdot 2^2}$
	$x^{131075}$	Welch	$x^{2021346123 \cdot 2^{16}}$
	$x^{67239935}$	Niho	$x^{22457003 \cdot 2^{27}}$
	$x^{17179869183}$	Inverse	$x^{17179869183 \cdot 2^2}$
	$x^{270549119}$	Dobbertin	$x^{5749168821 \cdot 2^1}$
	37	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{27487790695 \cdot 2^{35}}$
$x^9$		Gold ( $i = 3$ )	$x^{15270994831 \cdot 2^{34}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{24253932973 \cdot 2^{30}}$
$x^{33}$		Gold ( $i = 5$ )	$x^{20824083867 \cdot 2^{29}}$
$x^{65}$		Gold ( $i = 6$ )	$x^{2114445439 \cdot 2^{31}}$
$x^{129}$		Gold ( $i = 7$ )	$x^{13850437235 \cdot 2^{24}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{13369548007 \cdot 2^{27}}$
$x^{513}$		Gold ( $i = 9$ )	$x^{267912191 \cdot 2^{28}}$
$x^{1025}$		Gold ( $i = 10$ )	$x^{19710757741 \cdot 2^{18}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{7579600783 \cdot 2^{19}}$
$x^{4097}$		Gold ( $i = 12$ )	$x^{22912085333 \cdot 2^{14}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{20616682291 \cdot 2^{15}}$
$x^{16385}$		Gold ( $i = 14$ )	$x^{4034674207 \cdot 2^{19}}$
$x^{32769}$		Gold ( $i = 15$ )	$x^{22728239829 \cdot 2^{16}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{22168655541 \cdot 2^{17}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{19634435803 \cdot 2^{19}}$
$x^{262145}$		Gold ( $i = 18$ )	$x^{524287 \cdot 2^{19}}$
$x^{13}$		Kasami ( $i = 2$ )	$x^{10572227195 \cdot 2^{31}}$
$x^{57}$		Kasami ( $i = 3$ )	$x^{2411209719 \cdot 2^{28}}$
$x^{241}$		Kasami ( $i = 4$ )	$x^{2851430571 \cdot 2^{29}}$
$x^{993}$	Kasami ( $i = 5$ )	$x^{5952076405 \cdot 2^8}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
37	$x^{4033}$	Kasami ( $i = 6$ )	$x^{34078655 \cdot 2^{19}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{11066502243 \cdot 2^8}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{14175280307 \cdot 2^{27}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{9855378615 \cdot 2^{11}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{20242979181 \cdot 2^{32}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{8100434643 \cdot 2^{13}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{11184811 \cdot 2^{13}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{27487803803 \cdot 2^{34}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{12510719133 \cdot 2^8}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{22996667093 \cdot 2^{24}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{22235731637 \cdot 2^{17}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{20710209117 \cdot 2^{36}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{19634435805 \cdot 2^{36}}$
	$x^{262147}$	Welch	$x^{8096487055 \cdot 2^{12}}$
	$x^{262655}$	Niho	$x^{89478827 \cdot 2^{19}}$
	$x^{68719476735}$	Inverse	$x^{68719476735 \cdot 2^2}$
39	$x^3$	Gold ( $i = 1$ )	$x^{183251937963 \cdot 2^{38}}$
	$x^5$	Gold ( $i = 2$ )	$x^{109951162779 \cdot 2^{36}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{32338577295 \cdot 2^{32}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{16659267103 \cdot 2^{30}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{80971786605 \cdot 2^{26}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{91982490325 \cdot 2^{25}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{536347647 \cdot 2^{20}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{88808773301 \cdot 2^{18}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{53448948167 \cdot 2^{17}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{82249046451 \cdot 2^{18}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{53204340339 \cdot 2^{18}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{1048575 \cdot 2^{20}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{42288908763 \cdot 2^{34}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{57028611671 \cdot 2^{23}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{57024017081 \cdot 2^{22}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{78691134829 \cdot 2^{37}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{90912959189 \cdot 2^1}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{58940812745 \cdot 2^{32}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
39	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{93035615413 \cdot 2^{36}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{61083986603 \cdot 2^{37}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{39651134939 \cdot 2^{29}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{46293814983 \cdot 2^{34}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{78536994231 \cdot 2^{20}}$
	$x^{524291}$	Welch	$x^{32338947373 \cdot 2^{19}}$
	$x^{537395199}$	Niho	$x^{357914283 \cdot 2^{20}}$
	$x^{274877906943}$	Inverse	$x^{274877906943 \cdot 2^2}$
	41	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{439804651111 \cdot 2^{39}}$
$x^9$		Gold ( $i = 3$ )	$x^{244335917287 \cdot 2^{36}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{129354309151 \cdot 2^{37}}$
$x^{33}$		Gold ( $i = 5$ )	$x^{66637068351 \cdot 2^{36}}$
$x^{65}$		Gold ( $i = 6$ )	$x^{372142397109 \cdot 2^{31}}$
$x^{129}$		Gold ( $i = 7$ )	$x^{17046691967 \cdot 2^{28}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{367929961173 \cdot 2^{26}}$
$x^{513}$		Gold ( $i = 9$ )	$x^{355787388333 \cdot 2^{29}}$
$x^{1025}$		Gold ( $i = 10$ )	$x^{2145388543 \cdot 2^{31}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{314452813531 \cdot 2^{21}}$
$x^{4097}$		Gold ( $i = 12$ )	$x^{329021541787 \cdot 2^{21}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{329866910515 \cdot 2^{17}}$
$x^{16385}$		Gold ( $i = 14$ )	$x^{366526248277 \cdot 2^{15}}$
$x^{32769}$		Gold ( $i = 15$ )	$x^{323387747629 \cdot 2^{16}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{219476190835 \cdot 2^{19}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{121214460871 \cdot 2^{18}}$
$x^{262145}$		Gold ( $i = 18$ )	$x^{212809784551 \cdot 2^{21}}$
$x^{524289}$		Gold ( $i = 19$ )	$x^{314148576109 \cdot 2^{20}}$
$x^{1048577}$		Gold ( $i = 20$ )	$x^{2097151 \cdot 2^{21}}$
$x^{13}$		Kasami ( $i = 2$ )	$x^{169155635043 \cdot 2^{38}}$
$x^{57}$		Kasami ( $i = 3$ )	$x^{192896776803 \cdot 2^{37}}$
$x^{241}$		Kasami ( $i = 4$ )	$x^{191616143003 \cdot 2^{20}}$
$x^{993}$		Kasami ( $i = 5$ )	$x^{161660319895 \cdot 2^{32}}$
$x^{4033}$		Kasami ( $i = 6$ )	$x^{354962594485 \cdot 2^{19}}$
$x^{16257}$		Kasami ( $i = 7$ )	$x^{270532479 \cdot 2^0}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
41	$x^{65281}$	Kasami ( $i = 8$ )	$x^{365790866133 \cdot 2^{35}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{22954032981 \cdot 2^{28}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{314453862107 \cdot 2^{31}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{94121618197 \cdot 2^3}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{200952409245 \cdot 2^{11}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{439804664219 \cdot 2^{40}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{44739243 \cdot 2^{14}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{388062989133 \cdot 2^{36}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{85237621371 \cdot 2^{28}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{19309544439 \cdot 2^{28}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{226800278835 \cdot 2^{34}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{331361737069 \cdot 2^{20}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{157073239479 \cdot 2^2}$
	$x^{1048579}$	Welch	$x^{113185066767 \cdot 2^{24}}$
	$x^{1049599}$	Niho	$x^{358263467 \cdot 2^{32}}$
	$x^{1099511627775}$	Inverse	$x^{1099511627775 \cdot 2^2}$
43	$x^3$	Gold ( $i = 1$ )	$x^{2932031007403 \cdot 2^{42}}$
	$x^5$	Gold ( $i = 2$ )	$x^{1759218604443 \cdot 2^{40}}$
	$x^9$	Gold ( $i = 3$ )	$x^{977343669135 \cdot 2^{40}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{1552251709805 \cdot 2^{37}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{1332741367003 \cdot 2^{37}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{1488569588405 \cdot 2^{32}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{68186767615 \cdot 2^{36}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{855651072231 \cdot 2^{30}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{1320271272371 \cdot 2^{29}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{1261488462701 \cdot 2^{31}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{4292872191 \cdot 2^{22}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{852342918771 \cdot 2^{20}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{258740199183 \cdot 2^{18}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{1466104984917 \cdot 2^{16}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{879636149043 \cdot 2^{16}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{133276171295 \cdot 2^{17}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{1463163398869 \cdot 2^{19}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{484826138511 \cdot 2^{22}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
43	$x^{524289}$	Gold ( $i = 19$ )	$x^{1418729010605 \cdot 2^{21}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{1256587114203 \cdot 2^{22}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{4194303 \cdot 2^{22}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{676622540171 \cdot 2^{39}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{771587107283 \cdot 2^{31}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{1277440896429 \cdot 2^{25}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{1319856925899 \cdot 2^{17}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{1419850373813 \cdot 2^{26}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{541065087 \cdot 2^{22}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{780021615715 \cdot 2^{10}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{666112421021 \cdot 2^{42}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{1325913496365 \cdot 2^{31}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{628598842807 \cdot 2^{12}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{340933854331 \cdot 2^{41}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{517922526871 \cdot 2^{14}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{178956971 \cdot 2^{15}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{1759218617549 \cdot 2^{42}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{800165422301 \cdot 2^9}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{1471736556245 \cdot 2^{28}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{72978810871 \cdot 2^{40}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{91799339349 \cdot 2^{34}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{361512692501 \cdot 2^{38}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{1256587114205 \cdot 2^{42}}$
$x^{2097155}$	Welch	$x^{501247971087 \cdot 2^{27}}$	
$x^{4297064447}$	Niho	$x^{1433053867 \cdot 2^{33}}$	
$x^{4398046511103}$	Inverse	$x^{4398046511103 \cdot 2^2}$	
45	$x^3$	Gold ( $i = 1$ )	$x^{11728124029611 \cdot 2^{44}}$
	$x^5$	Gold ( $i = 2$ )	$x^{7036874417767 \cdot 2^{43}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{6209006839213 \cdot 2^{38}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{5182194338669 \cdot 2^{36}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{5065454347483 \cdot 2^{31}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{17171484671 \cdot 2^{34}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{5818970364597 \cdot 2^{21}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{3420732668359 \cdot 2^{20}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
45	$x^{65537}$	Gold ( $i = 16$ )	$x^{1954717168071 \cdot 2^{17}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{532840314943 \cdot 2^{23}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{5263807925659 \cdot 2^{23}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{8388607 \cdot 2^{23}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{2706490160699 \cdot 2^{37}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{5109763616173 \cdot 2^{22}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{5027575590253 \cdot 2^{22}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{2513477416649 \cdot 2^1}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{3770061385289 \cdot 2^{37}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{5954278611637 \cdot 2^{40}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{3909374683819 \cdot 2^1}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{3909374793047 \cdot 2^{41}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{3789086741177 \cdot 2^{37}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{2533412196059 \cdot 2^{44}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{5026342464951 \cdot 2^{23}}$
	$x^{4194307}$	Welch	$x^{1552252079887 \cdot 2^{25}}$
	$x^{4196351}$	Niho	$x^{5726624427 \cdot 2^{23}}$
	$x^{17592186044415}$	Inverse	$x^{17592186044415 \cdot 2^2}$
	$x^{68853957119}$	Dobbertin	$x^{5869799844565 \cdot 2^1}$
47	$x^3$	Gold ( $i = 1$ )	$x^{46912496118443 \cdot 2^{46}}$
	$x^5$	Gold ( $i = 2$ )	$x^{28147497671067 \cdot 2^{44}}$
	$x^9$	Gold ( $i = 3$ )	$x^{15637498706151 \cdot 2^{42}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{8278675785615 \cdot 2^{40}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{21323861872027 \cdot 2^{39}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{2165192128575 \cdot 2^{36}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{14182847663731 \cdot 2^{36}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{547616686335 \cdot 2^{32}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{21124340357555 \cdot 2^{31}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{7826377401287 \cdot 2^{31}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{20124980033243 \cdot 2^{35}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{34351353855 \cdot 2^{24}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{13621973425383 \cdot 2^{24}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{4131506372127 \cdot 2^{24}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{14074178335539 \cdot 2^{18}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
47	$x^{65537}$	Gold ( $i = 16$ )	$x^{23456605984085 \cdot 2^{17}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{22766374202669 \cdot 2^{19}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{20694684100973 \cdot 2^{23}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{23410479901525 \cdot 2^{20}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{23271587011253 \cdot 2^{22}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{22699629532853 \cdot 2^{22}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{20105374653293 \cdot 2^{23}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{16777215 \cdot 2^{24}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{10825960642875 \cdot 2^{36}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{12345393715667 \cdot 2^{33}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{583973015535 \cdot 2^{24}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{21117710003403 \cdot 2^{19}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{10364253419671 \cdot 2^{37}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{11332064480355 \cdot 2^{34}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{4311744255 \cdot 2^0}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{5402392617669 \cdot 2^3}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{8019716498131 \cdot 2^2}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{21207255168603 \cdot 2^{38}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{20124980033245 \cdot 2^{10}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{4928550175995 \cdot 2^6}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{12810976390301 \cdot 2^{13}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{28147497684173 \cdot 2^1}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{715827883 \cdot 2^{16}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{24836028343725 \cdot 2^{40}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{20728777484717 \cdot 2^{41}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{23479199247189 \cdot 2^{30}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{23275881454293 \cdot 2^{42}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{732314304171 \cdot 2^6}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{2891866428907 \cdot 2^4}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{10052678938039 \cdot 2^2}$
$x^{8388611}$	Welch	$x^{8278865269455 \cdot 2^{18}}$	
$x^{34368126975}$	Niho	$x^{22906493611 \cdot 2^{24}}$	
$x^{70368744177663}$	Inverse	$x^{70368744177663 \cdot 2^2}$	
49	$x^3$	Gold ( $i = 1$ )	$x^{187649984473771 \cdot 2^{48}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
49	$x^5$	Gold ( $i = 2$ )	$x^{11258990684263 \cdot 2^{47}}$
	$x^9$	Gold ( $i = 3$ )	$x^{62549994824591 \cdot 2^{46}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{33114703142431 \cdot 2^{45}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{17059089497631 \cdot 2^{40}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{8660768514175 \cdot 2^{43}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{2190466744831 \cdot 2^{41}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{91081571411373 \cdot 2^{33}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{93916528814933 \cdot 2^{31}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{90940182812341 \cdot 2^{34}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{137405407231 \cdot 2^{37}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{80460685400941 \cdot 2^{24}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{82787263147309 \cdot 2^{20}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{93826423903573 \cdot 2^{18}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{84442707768115 \cdot 2^{19}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{81030691384475 \cdot 2^{20}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{54727442643175 \cdot 2^{25}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{56185097971507 \cdot 2^{21}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{54479097024115 \cdot 2^{23}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{80421441091291 \cdot 2^{25}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{33554431 \cdot 2^{25}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{43303842570875 \cdot 2^{43}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{49381574861523 \cdot 2^{41}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{2335891922927 \cdot 2^{37}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{41385041893015 \cdot 2^{36}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{50111339799769 \cdot 2^{22}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{8623488767 \cdot 2^{25}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{81719652169125 \cdot 2^1}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{93641919605589 \cdot 2^1}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{2933417902763 \cdot 2^{17}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{40230342698423 \cdot 2^{14}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{11567935018475 \cdot 2^{14}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{99344109488973 \cdot 2^{48}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{2863311531 \cdot 2^{17}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{11258990893979 \cdot 2^{46}}$



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
49	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{51210587027037 \cdot 2^9}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{10956611979515 \cdot 2^9}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{43134770015075 \cdot 2^{39}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{58054630034739 \cdot 2^{40}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{84828207552205 \cdot 2^{22}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{80421441091293 \cdot 2^{48}}$
	$x^{16777219}$	Welch	$x^{32597285998351 \cdot 2^{31}}$
	$x^{16781311}$	Niho	$x^{22912084651 \cdot 2^{38}}$
	$x^{281474976710655}$	Inverse	$x^{281474976710655 \cdot 2^2}$
	51	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{450359962737051 \cdot 2^{48}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{397376437709165 \cdot 2^{45}}$
$x^{33}$		Gold ( $i = 5$ )	$x^{68236357990463 \cdot 2^{46}}$
$x^{129}$		Gold ( $i = 7$ )	$x^{226925562619507 \cdot 2^{38}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{324189078234843 \cdot 2^{42}}$
$x^{1025}$		Gold ( $i = 10$ )	$x^{375666115259221 \cdot 2^{32}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{124184177133455 \cdot 2^{37}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{274844360703 \cdot 2^{26}}$
$x^{16385}$		Gold ( $i = 14$ )	$x^{363228984292781 \cdot 2^{25}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{125101898527175 \cdot 2^{20}}$
$x^{524289}$		Gold ( $i = 19$ )	$x^{17321570070591 \cdot 2^{20}}$
$x^{1048577}$		Gold ( $i = 20$ )	$x^{337715103898035 \cdot 2^{24}}$
$x^{4194305}$		Gold ( $i = 22$ )	$x^{372345121630933 \cdot 2^{23}}$
$x^{8388609}$		Gold ( $i = 23$ )	$x^{217916145638631 \cdot 2^{26}}$
$x^{33554433}$		Gold ( $i = 25$ )	$x^{67108863 \cdot 2^{26}}$
$x^{13}$		Kasami ( $i = 2$ )	$x^{173215370283483 \cdot 2^{46}}$
$x^{241}$		Kasami ( $i = 4$ )	$x^{327024869207469 \cdot 2^{37}}$
$x^{993}$		Kasami ( $i = 5$ )	$x^{233570373431993 \cdot 2^{28}}$
$x^{16257}$		Kasami ( $i = 7$ )	$x^{171894172913319 \cdot 2^{23}}$
$x^{65281}$		Kasami ( $i = 8$ )	$x^{160845307688649 \cdot 2^{28}}$
$x^{1047553}$		Kasami ( $i = 10$ )	$x^{375116896316245 \cdot 2^{43}}$
$x^{4192257}$		Kasami ( $i = 11$ )	$x^{234684711933255 \cdot 2^{40}}$
$x^{67100673}$		Kasami ( $i = 13$ )	$x^{241283903483465 \cdot 2^{41}}$
$x^{268419073}$		Kasami ( $i = 14$ )	$x^{364326285645237 \cdot 2^6}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
51	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{250199979414871 \cdot 2^{50}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{242501526656441 \cdot 2^{41}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{162410546366939 \cdot 2^{37}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{372413839010517 \cdot 2^{23}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{189604902972103 \cdot 2^{43}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{321685716430263 \cdot 2^{26}}$
	$x^{33554435}$	Welch	$x^{132458859940683 \cdot 2^{24}}$
	$x^{274911461375}$	Niho	$x^{91648338603 \cdot 2^{39}}$
	$x^{1125899906842623}$	Inverse	$x^{1125899906842623 \cdot 2^2}$
	53	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{1801439850948199 \cdot 2^{51}}$
$x^9$		Gold ( $i = 3$ )	$x^{1000799917193447 \cdot 2^{48}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{1589505750836653 \cdot 2^{46}}$
$x^{33}$		Gold ( $i = 5$ )	$x^{1364727159809243 \cdot 2^{47}}$
$x^{65}$		Gold ( $i = 6$ )	$x^{1524295258494645 \cdot 2^{43}}$
$x^{129}$		Gold ( $i = 7$ )	$x^{1326641750698349 \cdot 2^{40}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{876186697932007 \cdot 2^{43}}$
$x^{513}$		Gold ( $i = 9$ )	$x^{17557893284351 \cdot 2^{36}}$
$x^{1025}$		Gold ( $i = 10$ )	$x^{500888153678791 \cdot 2^{34}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{901159515481907 \cdot 2^{34}}$
$x^{4097}$		Gold ( $i = 12$ )	$x^{872799146724979 \cdot 2^{37}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{1099377426431 \cdot 2^{40}}$
$x^{16385}$		Gold ( $i = 14$ )	$x^{1286899814184667 \cdot 2^{27}}$
$x^{32769}$		Gold ( $i = 15$ )	$x^{1489517921266389 \cdot 2^{24}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{136474798390303 \cdot 2^{22}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{1351083324191539 \cdot 2^{21}}$
$x^{262145}$		Gold ( $i = 18$ )	$x^{1501205602456917 \cdot 2^{19}}$
$x^{524289}$		Gold ( $i = 19$ )	$x^{496720610299663 \cdot 2^{23}}$
$x^{1048577}$		Gold ( $i = 20$ )	$x^{69277756416127 \cdot 2^{27}}$
$x^{2097153}$		Gold ( $i = 21$ )	$x^{1500467584215893 \cdot 2^{23}}$
$x^{4194305}$		Gold ( $i = 22$ )	$x^{264400271187727 \cdot 2^{23}}$
$x^{8388609}$		Gold ( $i = 23$ )	$x^{1347534017321395 \cdot 2^{25}}$
$x^{16777217}$		Gold ( $i = 24$ )	$x^{1452774211892653 \cdot 2^{26}}$
$x^{33554433}$		Gold ( $i = 25$ )	$x^{1286742904068973 \cdot 2^{26}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
53	$x^{67108865}$	Gold ( $i = 26$ )	$x^{134217727 \cdot 2^{27}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{692861481133923 \cdot 2^{50}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{158021039559159 \cdot 2^{36}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{1308099476829613 \cdot 2^{42}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{390039846882037 \cdot 2^{46}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{46900863959723 \cdot 2^{42}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{188931226294315 \cdot 2^{43}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{798741999750243 \cdot 2^{39}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{68853693951 \cdot 2^0}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{780220444764563 \cdot 2^{50}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{346938537894459 \cdot 2^{45}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{928874348792627 \cdot 2^{37}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{1286899881293531 \cdot 2^{40}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{1349541325280973 \cdot 2^{46}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{1507041121487573 \cdot 2^{48}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{819369392432349 \cdot 2^{14}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{1801439851157915 \cdot 2^{52}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{11453246123 \cdot 2^{18}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{529839292601043 \cdot 2^{17}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{628411381167255 \cdot 2^{15}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{1502665533729621 \cdot 2^{34}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{18689483349999 \cdot 2^{36}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{682373991820445 \cdot 2^{22}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{1457176544982197 \cdot 2^{21}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{1357250144131917 \cdot 2^{48}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{643371384925623 \cdot 2^2}$
$x^{67108867}$	Welch	$x^{529838282020495 \cdot 2^{20}}$	
$x^{67117055}$	Niho	$x^{366503881387 \cdot 2^{27}}$	
$x^{4503599627370495}$	Inverse	$x^{4503599627370495 \cdot 2^2}$	
55	$x^3$	Gold ( $i = 1$ )	$x^{12009599006321323 \cdot 2^{54}}$
	$x^5$	Gold ( $i = 2$ )	$x^{7205759403792795 \cdot 2^{52}}$
	$x^9$	Gold ( $i = 3$ )	$x^{4003199668773775 \cdot 2^{52}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{2119341001115535 \cdot 2^{48}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{6097181033978549 \cdot 2^{44}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
55	$x^{129}$	Gold ( $i = 7$ )	$x^{279293000147071 \cdot 2^{42}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{6028164481772245 \cdot 2^{41}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{70231573136383 \cdot 2^{46}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{5390688936447387 \cdot 2^{40}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{5149483865398125 \cdot 2^{40}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{2198889054207 \cdot 2^{28}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{3595897909601907 \cdot 2^{26}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{5828191795391789 \cdot 2^{23}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{6004822409696597 \cdot 2^{20}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{3602886573896499 \cdot 2^{20}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{5185930018907355 \cdot 2^{28}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{1057596915858975 \cdot 2^{28}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{1985840287966151 \cdot 2^{25}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{5146971156100827 \cdot 2^{28}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{268435455 \cdot 2^{28}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{2771445924535691 \cdot 2^{51}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{632084158227447 \cdot 2^{46}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{3139438744391323 \cdot 2^{39}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{187603455838891 \cdot 2^{43}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{3206844392482521 \cdot 2^{24}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{5957795741805269 \cdot 2^{25}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{137707388415 \cdot 2^{28}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{5403883185032403 \cdot 2^{52}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{5305612404709965 \cdot 2^{47}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{2573642555272631 \cdot 2^{15}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{1396465004896891 \cdot 2^{49}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{6358023004333485 \cdot 2^{52}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{45812984491 \cdot 2^{19}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{7205759404002509 \cdot 2^{54}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{1542088855751413 \cdot 2^{40}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{72563338526703 \cdot 2^{51}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{2053116142412499 \cdot 2^{26}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{5428996928747101 \cdot 2^{54}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{5146971156100829 \cdot 2^{54}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
55	$x^{134217731}$	Welch	$x^{2119341095857453 \cdot 2^{27}}$
	$x^{2199157473279}$	Niho	$x^{1466015509163 \cdot 2^{28}}$
	$x^{18014398509481983}$	Inverse	$x^{18014398509481983 \cdot 2^2}$
	$x^{17600780175359}$	Dobbertin	$x^{6006266234841941 \cdot 2^1}$
57	$x^3$	Gold ( $i = 1$ )	$x^{48038396025285291 \cdot 2^{56}}$
	$x^5$	Gold ( $i = 2$ )	$x^{28823037615171175 \cdot 2^{55}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{8477364004462111 \cdot 2^{53}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{21835634556947867 \cdot 2^{49}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{11117172000588031 \cdot 2^{50}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{24112657927088853 \cdot 2^{42}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{20668226972830573 \cdot 2^{38}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{14418552247707443 \cdot 2^{36}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{13948900786543847 \cdot 2^{42}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{8795556184063 \cdot 2^{43}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{21561094024518067 \cdot 2^{27}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{2182513929877567 \cdot 2^{29}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{14011200749597127 \cdot 2^{23}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{23312492809004461 \cdot 2^{28}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{24007472753323349 \cdot 2^{24}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{7943357093627791 \cdot 2^{29}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{23244386281903797 \cdot 2^{27}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{536870911 \cdot 2^{29}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{11085783698142779 \cdot 2^{49}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{14949708306624087 \cdot 2^{44}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{10304308513044185 \cdot 2^{31}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{15380442351703481 \cdot 2^{32}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{23831182967155413 \cdot 2^{34}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{20588512916761453 \cdot 2^{55}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{10999144301491755 \cdot 2^{55}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{12134714326624711 \cdot 2^{41}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{15441070109979209 \cdot 2^{46}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{10394272824315355 \cdot 2^{56}}$
$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{15520097177916089 \cdot 2^{55}}$	
$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{16012798675561131 \cdot 2^{55}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
57	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{21069746282997173 \cdot 2^{10}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{24025064937270613 \cdot 2^{36}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{15019821295179207 \cdot 2^{50}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{23314789352264885 \cdot 2^{48}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{20587884240924087 \cdot 2^{29}}$
	$x^{268435459}$	Welch	$x^{7417693515747087 \cdot 2^{32}}$
	$x^{268451839}$	Niho	$x^{1466104982187 \cdot 2^{44}}$
	$x^{72057594037927935}$	Inverse	$x^{72057594037927935 \cdot 2^2}$
	59	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{115292150460684699 \cdot 2^{56}}$
$x^9$		Gold ( $i = 3$ )	$x^{64051194700380391 \cdot 2^{54}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{101728368053545325 \cdot 2^{53}}$
$x^{33}$		Gold ( $i = 5$ )	$x^{17468507645558303 \cdot 2^{50}}$
$x^{65}$		Gold ( $i = 6$ )	$x^{8868626958514239 \cdot 2^{48}}$
$x^{129}$		Gold ( $i = 7$ )	$x^{84905072044690285 \cdot 2^{50}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{56075948667648231 \cdot 2^{46}}$
$x^{513}$		Gold ( $i = 9$ )	$x^{93267529125115309 \cdot 2^{47}}$
$x^{1025}$		Gold ( $i = 10$ )	$x^{562400733955071 \cdot 2^{40}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{31791149346162575 \cdot 2^{41}}$
$x^{4097}$		Gold ( $i = 12$ )	$x^{96100242573405525 \cdot 2^{37}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{95338010420009653 \cdot 2^{41}}$
$x^{16385}$		Gold ( $i = 14$ )	$x^{82361588107556571 \cdot 2^{44}}$
$x^{32769}$		Gold ( $i = 15$ )	$x^{17591649206271 \cdot 2^{30}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{92982080543839925 \cdot 2^{28}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{95889876499933909 \cdot 2^{27}}$
$x^{262145}$		Gold ( $i = 18$ )	$x^{82975427975670939 \cdot 2^{25}}$
$x^{524289}$		Gold ( $i = 19$ )	$x^{57646185181557555 \cdot 2^{22}}$
$x^{1048577}$		Gold ( $i = 20$ )	$x^{96076883676714325 \cdot 2^{21}}$
$x^{2097153}$		Gold ( $i = 21$ )	$x^{16954736093630223 \cdot 2^{22}}$
$x^{4194305}$		Gold ( $i = 22$ )	$x^{2234344533901439 \cdot 2^{23}}$
$x^{8388609}$		Gold ( $i = 23$ )	$x^{32021691793728455 \cdot 2^{27}}$
$x^{16777217}$		Gold ( $i = 24$ )	$x^{86455040815504179 \cdot 2^{26}}$
$x^{33554433}$		Gold ( $i = 25$ )	$x^{57533267058681459 \cdot 2^{28}}$
$x^{67108865}$		Gold ( $i = 26$ )	$x^{86242160334523803 \cdot 2^{30}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
59	$x^{134217729}$	Gold ( $i = 27$ )	$x^{55786526633217651 \cdot 2^{28}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{82351537270479725 \cdot 2^{29}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{1073741823 \cdot 2^{30}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{44343134792571195 \cdot 2^{48}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{50566732658195043 \cdot 2^{55}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{11959766645299243 \cdot 2^{52}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{580524423806943 \cdot 2^{30}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{51314011921949913 \cdot 2^{27}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{84641189379919149 \cdot 2^{29}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{50413051805539507 \cdot 2^{25}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{83679822162081189 \cdot 2^{33}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{1100585368575 \cdot 2^0}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{49931888879947163 \cdot 2^{55}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{96029891013291349 \cdot 2^1}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{1501385991386453 \cdot 2^{40}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{23692096872770293 \cdot 2^{43}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{82361588107556573 \cdot 2^{13}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{93122747233359541 \cdot 2^{50}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{96450631725066965 \cdot 2^{52}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{52439641115670109 \cdot 2^{14}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{115292150460894413 \cdot 2^1}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{183251937963 \cdot 2^{20}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{33909585372157591 \cdot 2^{18}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{40218260207936695 \cdot 2^{16}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{5061610896368631 \cdot 2^{40}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{22163453211271877 \cdot 2^{14}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{44168907146980451 \cdot 2^1}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{86470927036370131 \cdot 2^{23}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{20178919776699515 \cdot 2^{50}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{86863950036261229 \cdot 2^{29}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{41175768098368951 \cdot 2^2}$
	$x^{536870915}$	Welch	$x^{32849785523212047 \cdot 2^{35}}$
	$x^{17592722915327}$	Niho	$x^{5864419928747 \cdot 2^{45}}$
	$x^{288230376151711743}$	Inverse	$x^{288230376151711743 \cdot 2^2}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
61	$x^3$	Gold ( $i = 1$ )	$x^{768614336404564651 \cdot 2^{60}}$
	$x^5$	Gold ( $i = 2$ )	$x^{461168601842738791 \cdot 2^{59}}$
	$x^9$	Gold ( $i = 3$ )	$x^{256204778801521551 \cdot 2^{58}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{406913472214181293 \cdot 2^{54}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{69874030582233151 \cdot 2^{56}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{35474507834056831 \cdot 2^{55}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{232371776122310259 \cdot 2^{50}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{331969616112477403 \cdot 2^{47}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{346101192416090547 \cdot 2^{47}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{2249602935818239 \cdot 2^{51}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{372490988799284917 \cdot 2^{40}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{384400970293620053 \cdot 2^{38}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{67827189701025551 \cdot 2^{40}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{371946479911613869 \cdot 2^{44}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{70366596759551 \cdot 2^{46}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{329426249222118253 \cdot 2^{30}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{127102574455284679 \cdot 2^{28}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{339061704309303661 \cdot 2^{30}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{127160476236222223 \cdot 2^{27}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{384307534706333013 \cdot 2^{22}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{345876506357740339 \cdot 2^{23}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{345003027040988315 \cdot 2^{26}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{8937104323084543 \cdot 2^{31}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{230556167169271603 \cdot 2^{27}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{224163544907528647 \cdot 2^{28}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{383555107986713301 \cdot 2^{28}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{381281131836562101 \cdot 2^{29}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{223146098774220007 \cdot 2^{31}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{329406145400518363 \cdot 2^{31}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{2147483647 \cdot 2^{31}}$
$x^{13}$	Kasami ( $i = 2$ )	$x^{177372539170284155 \cdot 2^{55}}$	
$x^{57}$	Kasami ( $i = 3$ )	$x^{202266930632780243 \cdot 2^{49}}$	
$x^{241}$	Kasami ( $i = 4$ )	$x^{47839066581196971 \cdot 2^{53}}$	
$x^{993}$	Kasami ( $i = 5$ )	$x^{2322097693065183 \cdot 2^{46}}$	



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$	
61	$x^{4033}$	Kasami ( $i = 6$ )	$x^{169807928027886743 \cdot 2^{44}}$	
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{228782971880788787 \cdot 2^{29}}$	
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{345411969594533581 \cdot 2^{36}}$	
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{88511698988786373 \cdot 2^{37}}$	
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{2201170738175 \cdot 2^{31}}$	
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{371919247047874229 \cdot 2^{57}}$	
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{384260267165003093 \cdot 2^{51}}$	
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{200886773813505181 \cdot 2^{60}}$	
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{373002011208496309 \cdot 2^{58}}$	
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{164713124611042743 \cdot 2^{17}}$	
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{347579167140109133 \cdot 2^8}$	
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{20246426423411703 \cdot 2^{58}}$	
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{339620288178891181 \cdot 2^1}$	
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{135638858905866963 \cdot 2^{21}}$	
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{733007751851 \cdot 2^{21}}$	
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{461168601846094235 \cdot 2^{58}}$	
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{209623157939793053 \cdot 2^{16}}$	
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{206363872030435049 \cdot 2^{11}}$	
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{176680015969462115 \cdot 2^{47}}$	
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{202227427792341603 \cdot 2^{49}}$	
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{383559505999670101 \cdot 2^{54}}$	
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{6005526784644437 \cdot 2^{48}}$	
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{80715413850916091 \cdot 2^{59}}$	
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{94760686673324821 \cdot 2^{56}}$	
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{329406145400518365 \cdot 2^{60}}$	
	$x^{1073741827}$	Welch	$x^{101728368148287247 \cdot 2^{33}}$	
	$x^{1073774591}$	Niho	$x^{23456248081067 \cdot 2^{31}}$	
	$x^{1152921504606846975}$	Inverse	$x^{1152921504606846975 \cdot 2^2}$	
	63	$x^3$	Gold ( $i = 1$ )	$x^{3074457345618258603 \cdot 2^{62}}$
		$x^5$	Gold ( $i = 2$ )	$x^{1844674407370955163 \cdot 2^{60}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{542551296285575055 \cdot 2^{56}}$	
$x^{33}$		Gold ( $i = 5$ )	$x^{1397480611644663003 \cdot 2^{57}}$	
$x^{257}$		Gold ( $i = 8$ )	$x^{35888607147294975 \cdot 2^{48}}$	
$x^{1025}$		Gold ( $i = 10$ )	$x^{1322766526261123949 \cdot 2^{51}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
63	$x^{2049}$	Gold ( $i = 11$ )	$x^{1318910691458492123 \cdot 2^{43}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{1383562093652450099 \cdot 2^{41}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{140735340937215 \cdot 2^{32}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{892620709738172019 \cdot 2^{30}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{70949150992625727 \cdot 2^{26}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{896716847973298631 \cdot 2^{26}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{512409679771234759 \cdot 2^{23}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{1489929337488233141 \cdot 2^{24}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{1537041068643233109 \cdot 2^{27}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{1356245785945664813 \cdot 2^{27}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{1487640655539123629 \cdot 2^{31}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{4294967295 \cdot 2^{32}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{709490156681136603 \cdot 2^{58}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{956781331623939671 \cdot 2^{47}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{659475744830502617 \cdot 2^{49}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{984348171455213001 \cdot 2^{34}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{1317629607940942701 \cdot 2^{31}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{658813545545053769 \cdot 2^1}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{665163263472667067 \cdot 2^{56}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{988228485427982921 \cdot 2^{50}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{776681316259434183 \cdot 2^7}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{993286219361850809 \cdot 2^{59}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{1024819115206552235 \cdot 2^1}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{1024819115213542743 \cdot 2^{59}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{1560878344764576949 \cdot 2^{54}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{1537603949877177685 \cdot 2^{40}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{1320358825891032493 \cdot 2^{42}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{1492144392337003957 \cdot 2^{60}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{1317624578534239671 \cdot 2^{32}}$
	$x^{2147483651}$	Welch	$x^{542551344793440975 \cdot 2^{26}}$
	$x^{140739635838975}$	Niho	$x^{93824992258731 \cdot 2^{32}}$
$x^{4611686018427387903}$	Inverse	$x^{4611686018427387903 \cdot 2^2}$	
65	$x^3$	Gold ( $i = 1$ )	$x^{12297829382473034411 \cdot 2^{64}}$
	$x^5$	Gold ( $i = 2$ )	$x^{7378697629483820647 \cdot 2^{63}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
65	$x^9$	Gold ( $i = 3$ )	$x^{4099276460824344807 \cdot 2^{60}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{2170205185142300191 \cdot 2^{61}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{6243513378794002101 \cdot 2^{55}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{3717948417956963955 \cdot 2^{52}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{143554428589179391 \cdot 2^{57}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{5537619078657448371 \cdot 2^{49}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{18005606709331967 \cdot 2^{44}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{5520065470922116507 \cdot 2^{45}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{1083049606280658463 \cdot 2^{47}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{562941363617791 \cdot 2^{49}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{5270578727582545627 \cdot 2^{33}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{2033508212027934607 \cdot 2^{33}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{3586617681061034215 \cdot 2^{33}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{5534024101722272563 \cdot 2^{25}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{6148916157252719957 \cdot 2^{23}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{5425513092210306349 \cdot 2^{24}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{5290926603308321133 \cdot 2^{25}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{558719303392754719 \cdot 2^{28}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{6136881658933455701 \cdot 2^{29}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{6100498074754706133 \cdot 2^{30}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{5270498316591225709 \cdot 2^{32}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{8589934591 \cdot 2^{33}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{2837960626724546403 \cdot 2^{62}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{3236270890124483027 \cdot 2^{51}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{3214785274256445083 \cdot 2^{44}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{5955284102149790389 \cdot 2^{37}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{3660527550089450291 \cdot 2^{31}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{2645462202142565559 \cdot 2^{50}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{2793595967207959709 \cdot 2^{37}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{17600775976959 \cdot 2^0}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{1453634298555742837 \cdot 2^{44}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{2136293663498081943 \cdot 2^1}$
$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{5270578731877512923 \cdot 2^{49}}$	
$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{5559354423922964061 \cdot 2^{13}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
65	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{306095314058627063 \cdot 2^8}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{718052522689235195 \cdot 2^{17}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{7378697629487176091 \cdot 2^{64}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{2932031007403 \cdot 2^{22}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{6510615555442690893 \cdot 2^{60}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{5433924611392887149 \cdot 2^{53}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{18577069294288863 \cdot 2^{44}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{6136952027543415637 \cdot 2^{29}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{48035486901463723 \cdot 2^8}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{758085373009843691 \cdot 2^4}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{2635249154000645559 \cdot 2^2}$
	$x^{4294967299}$	Welch	$x^{2136295729148137231 \cdot 2^{39}}$
	$x^{4295032831}$	Niho	$x^{93826423892651 \cdot 2^{50}}$
	$x^{18446744073709551615}$	Inverse	$x^{18446744073709551615 \cdot 2^2}$
	$x^{4504149450301439}$	Dobbertin	$x^{6149290037024042325 \cdot 2^1}$
	67	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{29514790517935282587 \cdot 2^{64}}$
$x^9$		Gold ( $i = 3$ )	$x^{16397105843297379215 \cdot 2^{64}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{26042462221707602285 \cdot 2^{61}}$
$x^{33}$		Gold ( $i = 5$ )	$x^{22359689786314608027 \cdot 2^{59}}$
$x^{65}$		Gold ( $i = 6$ )	$x^{24974053515176008373 \cdot 2^{56}}$
$x^{129}$		Gold ( $i = 7$ )	$x^{21735698443440712045 \cdot 2^{54}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{21246055431198549723 \cdot 2^{58}}$
$x^{513}$		Gold ( $i = 9$ )	$x^{23876487456029517229 \cdot 2^{51}}$
$x^{1025}$		Gold ( $i = 10$ )	$x^{8206551509864932295 \cdot 2^{51}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{72022426837323775 \cdot 2^{56}}$
$x^{4097}$		Gold ( $i = 12$ )	$x^{14299941219941797491 \cdot 2^{44}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{22136993498439195443 \cdot 2^{43}}$
$x^{16385}$		Gold ( $i = 14$ )	$x^{14347592705239824839 \cdot 2^{45}}$
$x^{32769}$		Gold ( $i = 15$ )	$x^{24404261621760092885 \cdot 2^{46}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{21083279950213471085 \cdot 2^{49}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{1125891317039103 \cdot 2^{34}}$
$x^{262145}$		Gold ( $i = 18$ )	$x^{14281422889040452839 \cdot 2^{34}}$
$x^{524289}$		Gold ( $i = 19$ )	$x^{24547667372953480021 \cdot 2^{30}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
67	$x^{1048577}$	Gold ( $i = 20$ )	$x^{1135046761120784511 \cdot 2^{34}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{4340412439953608463 \cdot 2^{26}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{24595664629008782677 \cdot 2^{24}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{14757397018187084595 \cdot 2^{24}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{4332189904428104735 \cdot 2^{29}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{287108865734934783 \cdot 2^{26}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{8138252895016945551 \cdot 2^{34}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{24592656548468798805 \cdot 2^{28}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{2234876672140769343 \cdot 2^{34}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{14728515953898710835 \cdot 2^{30}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{22077992941747231155 \cdot 2^{32}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{23802250453157861045 \cdot 2^{32}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{21081993236913698523 \cdot 2^{34}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{17179869183 \cdot 2^{34}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{11351842506898185611 \cdot 2^{63}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{12945083560497930963 \cdot 2^{59}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{21431901828376243629 \cdot 2^{49}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{6390412851315833461 \cdot 2^{38}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{23821136408607414965 \cdot 2^{32}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{21668144481243450669 \cdot 2^{33}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{13136322030899639885 \cdot 2^{28}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{1540419111998889813 \cdot 2^{14}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{12782004767605189011 \cdot 2^{34}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{35201551955967 \cdot 2^{34}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{11900544100324183139 \cdot 2^{13}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{11174453729448024251 \cdot 2^{62}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{2583962199428368635 \cdot 2^{65}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{192159402348784299 \cdot 2^{23}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{3032464877624514027 \cdot 2^{20}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{10541077033743117751 \cdot 2^{18}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{15220308792661613875 \cdot 2^6}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{24619654529661840213 \cdot 2^{60}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{10295892069044302999 \cdot 2^{22}}$
$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{8680853855272343191 \cdot 2^{22}}$	

**Table 26:** (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
67	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{11728124029611 \cdot 2^{23}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{29514790517938638029 \cdot 2^{66}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{13415830930878262429 \cdot 2^{18}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{13207147620076173033 \cdot 2^{12}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{648219425136216055 \cdot 2^{12}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{24597160148062614869 \cdot 2^{42}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{73182935603347423 \cdot 2^{62}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{5684240996268728955 \cdot 2^{61}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{22136544127970233555 \cdot 2^{25}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{23874310245145269941 \cdot 2^{32}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{22237171005948532429 \cdot 2^{31}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{21081993236913698525 \cdot 2^{66}}$
	$x^{8589934595}$	Welch	$x^{8680820752696167243 \cdot 2^{32}}$
	$x^{1125908496777215}$	Niho	$x^{375305695570603 \cdot 2^{51}}$
	$x^{73786976294838206463}$	Inverse	$x^{73786976294838206463 \cdot 2^{2}}$
	69	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{118059162071741130343 \cdot 2^{67}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{104169848886830409133 \cdot 2^{62}}$
$x^{33}$		Gold ( $i = 5$ )	$x^{17887751829051686431 \cdot 2^{60}}$
$x^{129}$		Gold ( $i = 7$ )	$x^{4575936514408571007 \cdot 2^{56}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{57421771435671756007 \cdot 2^{59}}$
$x^{1025}$		Gold ( $i = 10$ )	$x^{98478618118379187029 \cdot 2^{51}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{84410284253343463131 \cdot 2^{57}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{17363760563462479631 \cdot 2^{44}}$
$x^{16385}$		Gold ( $i = 14$ )	$x^{98388639492805932373 \cdot 2^{43}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{95213650476858529461 \cdot 2^{49}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{4503565267894271 \cdot 2^{52}}$
$x^{524289}$		Gold ( $i = 19$ )	$x^{88312042551161310619 \cdot 2^{35}}$
$x^{1048577}$		Gold ( $i = 20$ )	$x^{88529988196213037491 \cdot 2^{33}}$
$x^{4194305}$		Gold ( $i = 22$ )	$x^{32794219505344344519 \cdot 2^{26}}$
$x^{33554433}$		Gold ( $i = 25$ )	$x^{97625845626986779317 \cdot 2^{27}}$
$x^{67108865}$	Gold ( $i = 26$ )	$x^{1148426683959607807 \cdot 2^{35}}$	
$x^{268435457}$	Gold ( $i = 28$ )	$x^{59022375496395944755 \cdot 2^{29}}$	
$x^{536870913}$	Gold ( $i = 29$ )	$x^{86799725934704028013 \cdot 2^{34}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
69	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{32535989685851382727 \cdot 2^{32}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{57125401073391619699 \cdot 2^{33}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{34359738367 \cdot 2^{35}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{45407370027592742459 \cdot 2^{61}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{85727607313505004973 \cdot 2^{46}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{61229071970741875385 \cdot 2^{52}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{62998291872569136569 \cdot 2^{38}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{49127267316353642951 \cdot 2^{34}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{98190387742496172885 \cdot 2^{31}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{42163996511779534409 \cdot 2^{37}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{61224436315675471415 \cdot 2^{68}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{98370626193875187029 \cdot 2^1}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{95497377255530353333 \cdot 2^{49}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{63246060104552518217 \cdot 2^{55}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{42503603626023472859 \cdot 2^{11}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{42574941487893350875 \cdot 2^{64}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{65588423373196973399 \cdot 2^{68}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{99896214061761256117 \cdot 2^{58}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{63287075186799848905 \cdot 2^{55}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{45052635779177281083 \cdot 2^{50}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{84493962090025545133 \cdot 2^{63}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{61521172752142521799 \cdot 2^{59}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{49703242443389112007 \cdot 2^{64}}$
$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{84327972923112123831 \cdot 2^{35}}$	
$x^{17179869187}$	Welch	$x^{34723283738402657935 \cdot 2^{28}}$	
$x^{17180000255}$	Niho	$x^{1501199875877547 \cdot 2^{35}}$	
$x^{295147905179352825855}$	Inverse	$x^{295147905179352825855 \cdot 2^2}$	
71	$x^3$	Gold ( $i = 1$ )	$x^{787061080478274202283 \cdot 2^{70}}$
	$x^5$	Gold ( $i = 2$ )	$x^{472236648286964521371 \cdot 2^{68}}$
	$x^9$	Gold ( $i = 3$ )	$x^{262353693492758067431 \cdot 2^{66}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{138893131849107212175 \cdot 2^{64}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{71551007316206745663 \cdot 2^{66}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{36325896022074193983 \cdot 2^{60}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{18303746057634283775 \cdot 2^{64}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
71	$x^{257}$	Gold ( $i = 8$ )	$x^{395061787477421681365 \cdot 2^{57}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{4602696377065931263 \cdot 2^{54}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{393914472473516747605 \cdot 2^{52}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{381430772530466707125 \cdot 2^{56}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{576320049166422015 \cdot 2^{48}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{390504490680359410357 \cdot 2^{47}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{393554557971223721301 \cdot 2^{44}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{347234948899093966125 \cdot 2^{46}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{353256964497435580851 \cdot 2^{50}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{337317038565280823003 \cdot 2^{53}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{9007164895264767 \cdot 2^{36}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{380837168900077958573 \cdot 2^{35}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{235657381161210898227 \cdot 2^{32}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{339865109719108248795 \cdot 2^{36}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{353283099689963908251 \cdot 2^{31}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{236118352290980770611 \cdot 2^{26}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{393530563695387956565 \cdot 2^{25}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{381956113619879800109 \cdot 2^{27}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{228796825856802342515 \cdot 2^{27}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{338619232311171500909 \cdot 2^{35}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{354173883775339567923 \cdot 2^{32}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{131160834192069685703 \cdot 2^{30}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{229543461219295770855 \cdot 2^{36}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{69310663215258935055 \cdot 2^{32}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{130143958223951218575 \cdot 2^{36}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{228501604045289659623 \cdot 2^{36}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{337311891712082631533 \cdot 2^{35}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{68719476735 \cdot 2^{36}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{181629480110370969915 \cdot 2^{60}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{41424267393593381367 \cdot 2^{54}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{9797440835829174255 \cdot 2^{48}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{173581446752006092951 \cdot 2^{62}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{585465718192209855 \cdot 2^{36}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{210163754097111279321 \cdot 2^{32}}$



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$	
71	$x^{65281}$	Kasami ( $i = 8$ )	$x^{3074410249873009323 \cdot 2^{56}}$	
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{169314110959086609591 \cdot 2^{55}}$	
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{392761550969983642453 \cdot 2^{42}}$	
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{380836297379723040437 \cdot 2^{34}}$	
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{281543696183295 \cdot 2^0}$	
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{381135895287311456917 \cdot 2^1}$	
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{393518531373228012885 \cdot 2^{59}}$	
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{343197472997092567405 \cdot 2^{54}}$	
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{354175698849336446163 \cdot 2^{66}}$	
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{353773175944390744653 \cdot 2^{61}}$	
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{337317038565280823005 \cdot 2^{16}}$	
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{24642193120863895893 \cdot 2^5}$	
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{180920336215357844323 \cdot 2^1}$	
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{101062317727049681653 \cdot 2^{64}}$	
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{214654113730348084381 \cdot 2^{21}}$	
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{472236648286967876813 \cdot 2^1}$	
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{46912496118443 \cdot 2^{24}}$	
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{416679395547574281645 \cdot 2^{64}}$	
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{91518730288437773435 \cdot 2^{62}}$	
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{48375462630274323499 \cdot 2^{21}}$	
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{90817511162840047301 \cdot 2^3}$	
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{204532359794883619283 \cdot 2^{49}}$	
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{207080745390853016675 \cdot 2^2}$	
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{205709182284651457693 \cdot 2^{30}}$	
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{134552986525794226899 \cdot 2^{30}}$	
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{243490042045691174195 \cdot 2^{64}}$	
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{355794735492704394061 \cdot 2^{66}}$	
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{168655945821681577399 \cdot 2^2}$	
	$x^{34359738371}$	Welch	$x^{138893131873361145133 \cdot 2^{35}}$	
	$x^{9007233614479359}$	Niho	$x^{6004799503248043 \cdot 2^{36}}$	
	$x^{1180591620717411303423}$	Inverse	$x^{1180591620717411303423 \cdot 2^2}$	
	73	$x^3$	Gold ( $i = 1$ )	$x^{3148244321913096809131 \cdot 2^{72}}$
		$x^5$	Gold ( $i = 2$ )	$x^{1888946593147858085479 \cdot 2^{71}}$
		$x^9$	Gold ( $i = 3$ )	$x^{1049414773971032269711 \cdot 2^{70}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
73	$x^{17}$	Gold ( $i = 4$ )	$x^{555572527396428848671 \cdot 2^{69}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{1431020146324134913243 \cdot 2^{67}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{145303584088296775807 \cdot 2^{67}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{1391084700380205566829 \cdot 2^{64}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{1580247149909686725333 \cdot 2^{58}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{18410785508263724031 \cdot 2^{64}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{525219296631355663303 \cdot 2^{54}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{520866190887525533583 \cdot 2^{59}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{2305280196665679871 \cdot 2^{61}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{914155161946937302247 \cdot 2^{50}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{918245933135348775367 \cdot 2^{48}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{944502118731961758515 \cdot 2^{46}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{942643061612534883955 \cdot 2^{51}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{914043606771821039219 \cdot 2^{52}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{36028659580534783 \cdot 2^{55}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{1349257860456555928429 \cdot 2^{36}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{1561729767800207923893 \cdot 2^{35}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{1573354297586228046677 \cdot 2^{33}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{36607500843174838399 \cdot 2^{30}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{1388931351605775510829 \cdot 2^{28}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{1574122254781543437653 \cdot 2^{26}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{1416709958934644077363 \cdot 2^{27}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{143102016764800695327 \cdot 2^{27}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{1350560064235451917531 \cdot 2^{29}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{1525687078908582319797 \cdot 2^{35}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{1574074125492643607893 \cdot 2^{31}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{1527807495741540511021 \cdot 2^{32}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{1416479248189991262643 \cdot 2^{35}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{277242650726563069471 \cdot 2^{37}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{1412991546124744969627 \cdot 2^{37}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{1523344026874016085421 \cdot 2^{36}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{1349247566612720891611 \cdot 2^{37}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{137438953471 \cdot 2^{37}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{726517920441483879035 \cdot 2^{67}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
73	$x^{57}$	Kasami ( $i = 3$ )	$x^{165697069574373516279 \cdot 2^{64}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{39189763343316557807 \cdot 2^{61}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{1417185510468433374411 \cdot 2^{47}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{2341862872734760895 \cdot 2^{55}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{198108749542787601451 \cdot 2^{53}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{12297640999492037291 \cdot 2^{57}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{842951613454658123465 \cdot 2^{31}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{538191809792798515923 \cdot 2^{45}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{818048021019853540763 \cdot 2^{36}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{563087392370687 \cdot 2^{37}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{837829916953043635299 \cdot 2^{15}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{825896192892564576467 \cdot 2^{68}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{723680219648387065691 \cdot 2^{68}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{946317999348703343411 \cdot 2^{51}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{330611421896056357499 \cdot 2^{52}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{674628930228277833143 \cdot 2^{20}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{1390834457679064390221 \cdot 2^{59}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{1562017962721437637333 \cdot 2^8}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{1575657889895139683157 \cdot 2^{64}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{658935975246834803895 \cdot 2^{23}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{1666717582189302336333 \cdot 2^{72}}$
	$x^{28147495933441}$	Kasami ( $i = 24$ )	$x^{187649984473771 \cdot 2^{25}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{1888946593147911772571 \cdot 2^{70}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{858612633685344871645 \cdot 2^{19}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{404249270907145874197 \cdot 2^{68}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{1525723090122000980661 \cdot 2^{63}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{1574218236282672952661 \cdot 2^{46}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{1371029381644178273709 \cdot 2^{53}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{362549557348285768389 \cdot 2^{34}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{546891740805393323671 \cdot 2^{33}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{715518809548147289245 \cdot 2^{27}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{98289566348468732245 \cdot 2^{64}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{1423178940103153989213 \cdot 2^{72}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{1349247566612720891613 \cdot 2^{72}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
73	$x^{68719476739}$	Welch	$x^{486125961474906984207 \cdot 2^{40}}$
	$x^{68719738879}$	Niho	$x^{6004822409652907 \cdot 2^{56}}$
	$x^{4722366482869645213695}$	Inverse	$x^{4722366482869645213695 \cdot 2^2}$
75	$x^3$	Gold ( $i = 1$ )	$x^{12592977287652387236523 \cdot 2^{74}}$
	$x^5$	Gold ( $i = 2$ )	$x^{7555786372591432341915 \cdot 2^{72}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{6666870328757146184045 \cdot 2^{69}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{3807179179987931025011 \cdot 2^{64}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{3674993371882992384231 \cdot 2^{62}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{3779736960422751659827 \cdot 2^{56}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{5399625193643700280173 \cdot 2^{50}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{1109042796831394250271 \cdot 2^{52}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{572416792650204642335 \cdot 2^{49}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{2082448579874310448071 \cdot 2^{52}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{72057456599498751 \cdot 2^{38}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{6111230114923631977901 \cdot 2^{37}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{6102750566351538705077 \cdot 2^{30}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{3672951716717363229127 \cdot 2^{29}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{36821571153698750975 \cdot 2^{29}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{5652529032222744137115 \cdot 2^{38}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{5437841619149711961243 \cdot 2^{33}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{6293412686747431250773 \cdot 2^{34}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{6246909993641489291957 \cdot 2^{36}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{274877906943 \cdot 2^{38}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{2906071681765935516123 \cdot 2^{70}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{5486566868064318090669 \cdot 2^{61}}$
$x^{16257}$	Kasami ( $i = 7$ )	$x^{2883905667831145795239 \cdot 2^{35}}$	
$x^{65281}$	Kasami ( $i = 8$ )	$x^{3144145108246603674055 \cdot 2^{37}}$	
$x^{4192257}$	Kasami ( $i = 11$ )	$x^{2883323637381053838891 \cdot 2^{40}}$	
$x^{67100673}$	Kasami ( $i = 13$ )	$x^{5396992839936384916333 \cdot 2^{73}}$	
$x^{268419073}$	Kasami ( $i = 14$ )	$x^{3918363360048332501561 \cdot 2^{73}}$	
$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{3923267720516108767673 \cdot 2^{56}}$	
$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{3937355056274553000391 \cdot 2^{55}}$	
$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{4047747846588281360969 \cdot 2^{59}}$	
$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{5523307569610008864181 \cdot 2^{19}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
75	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{6393357699885124211893 \cdot 2^{72}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{4197659095884158905003 \cdot 2^{73}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{4050372811852312047049 \cdot 2^{59}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{2701788531195313811163 \cdot 2^{16}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{2698834831893059057369 \cdot 2^{53}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{6293417190344911138133 \cdot 2^{66}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{6248062985506250377941 \cdot 2^{29}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{5396990266254542204343 \cdot 2^{38}}$
	$x^{137438953475}$	Welch	$x^{2152843543662677659407 \cdot 2^{43}}$
	$x^{72057731476881407}$	Niho	$x^{24019289638611627 \cdot 2^{57}}$
	$x^{18889465931478580854783}$	Inverse	$x^{18889465931478580854783 \cdot 2^2}$
	$x^{1152956690052710399}$	Dobbertin	$x^{6296584723550364677461 \cdot 2^1}$
	77	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{30223145490365729367655 \cdot 2^{75}}$
$x^9$		Gold ( $i = 3$ )	$x^{16790636383536516315367 \cdot 2^{72}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{26667481315028584736173 \cdot 2^{70}}$
$x^{33}$		Gold ( $i = 5$ )	$x^{22896322341186158611867 \cdot 2^{69}}$
$x^{65}$		Gold ( $i = 6$ )	$x^{25573430799540232541877 \cdot 2^{67}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{21755960761547314914523 \cdot 2^{63}}$
$x^{513}$		Gold ( $i = 9$ )	$x^{24449523154974225511853 \cdot 2^{65}}$
$x^{1025}$		Gold ( $i = 10$ )	$x^{21672206766262254717805 \cdot 2^{58}}$
$x^{4097}$		Gold ( $i = 12$ )	$x^{14643139809220398534259 \cdot 2^{61}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{18444492548740227071 \cdot 2^{52}}$
$x^{32769}$		Gold ( $i = 15$ )	$x^{15112033899711388087091 \cdot 2^{48}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{8395446292203001409991 \cdot 2^{49}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{25136955785190084815573 \cdot 2^{53}}$
$x^{262145}$		Gold ( $i = 18$ )	$x^{14624177038377390152935 \cdot 2^{57}}$
$x^{524289}$		Gold ( $i = 19$ )	$x^{288229826396946431 \cdot 2^{58}}$
$x^{1048577}$		Gold ( $i = 20$ )	$x^{21588002240275703248603 \cdot 2^{39}}$
$x^{8388609}$	Gold ( $i = 23$ )	$x^{585702068917660254463 \cdot 2^{39}}$	
$x^{16777217}$	Gold ( $i = 24$ )	$x^{4436162462134362995743 \cdot 2^{34}}$	
$x^{33554433}$	Gold ( $i = 25$ )	$x^{22667359342954280071987 \cdot 2^{29}}$	
$x^{67108865}$	Gold ( $i = 26$ )	$x^{25185954950604754605397 \cdot 2^{27}}$	
$x^{134217729}$	Gold ( $i = 27$ )	$x^{8333587915085771116303 \cdot 2^{31}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
77	$x^{536870913}$	Gold ( $i = 29$ )	$x^{147286003414159852543 \cdot 2^{39}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{4444546313854782414607 \cdot 2^{35}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{25185185972696851862869 \cdot 2^{32}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{1162286774945720037439 \cdot 2^{33}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{15082000196881039025779 \cdot 2^{37}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{24373504428849277621941 \cdot 2^{37}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{21587961065175241907053 \cdot 2^{38}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{549755813887 \cdot 2^{39}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{11624286727063742064483 \cdot 2^{74}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{13255765565949881301603 \cdot 2^{73}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{21946267472257272362413 \cdot 2^{66}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{22674968167494933179595 \cdot 2^{49}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{24392843682405268806325 \cdot 2^{55}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{13451593759632877237837 \cdot 2^{33}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{24445199699365237929133 \cdot 2^{29}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{22188148146292569824045 \cdot 2^{35}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{12186157157632183471203 \cdot 2^{54}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{4504149383176191 \cdot 2^0}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{5812010335480903594299 \cdot 2^{65}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{1325718145915514528247 \cdot 2^{65}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{98383388591775503701 \cdot 2^{52}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{5289765362142218519799 \cdot 2^{62}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{21588002240550581155547 \cdot 2^{58}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{6210740761125486717717 \cdot 2^{12}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{13524262717386590332649 \cdot 2^{19}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{13737810873219340725405 \cdot 2^{23}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{30223145490365783054747 \cdot 2^{76}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{750599937895083 \cdot 2^{26}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{8889160703260486718163 \cdot 2^{25}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{10762388464430327080119 \cdot 2^{21}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{313556377726093500399 \cdot 2^{52}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{25186338894200921838933 \cdot 2^{48}}$
	$x^{1846744069414584321}$	Kasami ( $i = 32$ )	$x^{18734938990678900671 \cdot 2^{52}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{15141087985181156782899 \cdot 2^{62}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
77	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{786316462616988712619 \cdot 2^6}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{22770863041228733340013 \cdot 2^{38}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{10793980532312743046583 \cdot 2^2}$
	$x^{274877906947}$	Welch	$x^{6666870328781400117007 \cdot 2^{41}}$
	$x^{274878431231}$	Niho	$x^{96076792050920107 \cdot 2^{39}}$
	$x^{75557863725914323419135}$	Inverse	$x^{75557863725914323419135 \cdot 2^2}$
79	$x^3$	Gold ( $i = 1$ )	$x^{201487636602438195784363 \cdot 2^{78}}$
	$x^5$	Gold ( $i = 2$ )	$x^{120892581961462917470619 \cdot 2^{76}}$
	$x^9$	Gold ( $i = 3$ )	$x^{67162545534146065261455 \cdot 2^{76}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{35556641753371446314895 \cdot 2^{72}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{18317057872948926889503 \cdot 2^{70}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{102293723198160930167477 \cdot 2^{68}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{60914866879806896399987 \cdot 2^{66}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{2351995758005115126015 \cdot 2^{64}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{90728350984723632019891 \cdot 2^{65}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{589719912007136183295 \cdot 2^{60}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{60475791366764026554163 \cdot 2^{58}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{90440752675587952659867 \cdot 2^{64}}$
	$x^8193$	Gold ( $i = 13$ )	$x^{73777970194960891903 \cdot 2^{66}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{97503538029950104024493 \cdot 2^{53}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{88892146918168055082285 \cdot 2^{50}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{10074535506436016887125 \cdot 2^{49}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{9154126906132608972863 \cdot 2^{57}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{33316998545865412167567 \cdot 2^{58}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{86352503069219562642285 \cdot 2^{58}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{576460202548658175 \cdot 2^{40}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{97494166474851366917813 \cdot 2^{38}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{17743601840683113914127 \cdot 2^{36}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{33577177494300072141767 \cdot 2^{37}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{86686541468602468092269 \cdot 2^{32}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{97780765086689102998829 \cdot 2^{31}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{100743819802418984867157 \cdot 2^{28}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{60446291431091434894131 \cdot 2^{28}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{87006024913566494256283 \cdot 2^{30}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
79	$x^{536870913}$	Gold ( $i = 29$ )	$x^{58505894480924855703783 \cdot 2^{32}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{86435842985716625254107 \cdot 2^{40}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{58767163295092511226311 \cdot 2^{37}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{90668514140930591798067 \cdot 2^{34}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{4649147029955367919743 \cdot 2^{40}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{100694602970358119837013 \cdot 2^{35}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{100546667976269158001365 \cdot 2^{37}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{99950559893831151872725 \cdot 2^{37}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{58496410628784274394739 \cdot 2^{38}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{86351844258816090552027 \cdot 2^{40}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{1099511627775 \cdot 2^{40}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{46497146908254968257931 \cdot 2^{75}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{53023062263799525206483 \cdot 2^{67}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{52671041933417453670043 \cdot 2^{63}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{44436850368513559795351 \cdot 2^{66}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{97571374729621075221173 \cdot 2^{62}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{48670846339286141070435 \cdot 2^{50}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{43343252719903794111671 \cdot 2^{57}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{90669551988431072840883 \cdot 2^{29}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{53948830992260007573193 \cdot 2^{33}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{23245739653376466969147 \cdot 2^{38}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{23816344348637070703221 \cdot 2^{15}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{9008298766360575 \cdot 2^{40}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{87744617102061667267749 \cdot 2^1}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{12549909351957218285611 \cdot 2^{16}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{100740743890787407418709 \cdot 2^1}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{53806348771798455379165 \cdot 2^{77}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{34445492493011415913171 \cdot 2^{77}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{91083515337611559721773 \cdot 2^{58}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{43175963304783384374711 \cdot 2^{21}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{3145265986805316288171 \cdot 2^{22}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{1254225493314402263023 \cdot 2^{75}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{5307479208068516422647 \cdot 2^{70}}$
$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{89029420824333688985965 \cdot 2^{74}}$	



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$	
79	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{106669925260114591589805 \cdot 2^{76}}$	
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{3002399751580331 \cdot 2^{27}}$	
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{120892581961462971157709 \cdot 2^{78}}$	
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{54951208555862071785053 \cdot 2^{19}}$	
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{11760122344454164808955 \cdot 2^{14}}$	
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{90566185119985347176141 \cdot 2^{67}}$	
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{53012706829031065729635 \cdot 2^{61}}$	
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{45770634531212796483899 \cdot 2^{55}}$	
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{74363366128709795775 \cdot 2^{73}}$	
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{100694675027943567830357 \cdot 2^{35}}$	
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{393533536774849123669 \cdot 2^{62}}$	
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{99969007200820455099093 \cdot 2^{66}}$	
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{62333450559181536480563 \cdot 2^{70}}$	
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{24840941506642379664149 \cdot 2^{74}}$	
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{86351844258816090552029 \cdot 2^{78}}$	
	$x^{549755813891}$	Welch	$x^{35556641765789459993295 \cdot 2^{34}}$	
	$x^{576461302059237375}$	Niho	$x^{384307168202631851 \cdot 2^{40}}$	
	$x^{302231454903657293676543}$	Inverse	$x^{302231454903657293676543 \cdot 2^2}$	
	81	$x^3$	Gold ( $i = 1$ )	$x^{805950546409752783137451 \cdot 2^{80}}$
		$x^5$	Gold ( $i = 2$ )	$x^{483570327845851669882471 \cdot 2^{79}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{142226567013485785259551 \cdot 2^{77}}$	
$x^{33}$		Gold ( $i = 5$ )	$x^{73268231491795707557951 \cdot 2^{76}}$	
$x^{129}$		Gold ( $i = 7$ )	$x^{356117683297332625107309 \cdot 2^{68}}$	
$x^{257}$		Gold ( $i = 8$ )	$x^{9407983032020460503551 \cdot 2^{73}}$	
$x^{1025}$		Gold ( $i = 10$ )	$x^{2358879648028544731135 \cdot 2^{71}}$	
$x^{2049}$		Gold ( $i = 11$ )	$x^{133341744867206536595343 \cdot 2^{63}}$	
$x^{8193}$		Gold ( $i = 13$ )	$x^{345576012393196817668973 \cdot 2^{66}}$	
$x^{16385}$		Gold ( $i = 14$ )	$x^{345449538445876948186843 \cdot 2^{55}}$	
$x^{65537}$		Gold ( $i = 16$ )	$x^{402981422025744067515733 \cdot 2^{50}}$	
$x^{131073}$		Gold ( $i = 17$ )	$x^{391123330560664399097133 \cdot 2^{53}}$	
$x^{524289}$		Gold ( $i = 19$ )	$x^{389977260953679695361453 \cdot 2^{59}}$	
$x^{1048577}$		Gold ( $i = 20$ )	$x^{2305840810192535551 \cdot 2^{61}}$	
$x^{4194305}$	Gold ( $i = 22$ )	$x^{399802530057431314426581 \cdot 2^{38}}$		
$x^{8388609}$	Gold ( $i = 23$ )	$x^{402778555996603371138389 \cdot 2^{36}}$		

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
81	$x^{33554433}$	Gold ( $i = 25$ )	$x^{399875463688137319600821 \cdot 2^{33}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{235068909869911187943879 \cdot 2^{32}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{134325091568692104032711 \cdot 2^{29}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{36616503191333383696447 \cdot 2^{35}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{234287931667330784349811 \cdot 2^{39}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{24178331930481388828211 \cdot 2^{35}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{348021863345171870737627 \cdot 2^{41}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{362618687483835422710579 \cdot 2^{37}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{361725835794636681828787 \cdot 2^{39}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{233985642507192239365351 \cdot 2^{41}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{2199023255551 \cdot 2^{41}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{185988587633019873031739 \cdot 2^{73}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{250814485397225969856087 \cdot 2^{68}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{250794278792158721045177 \cdot 2^{58}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{345492363777423223516525 \cdot 2^{40}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{258040967057953205300681 \cdot 2^{43}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{258928999719972058262985 \cdot 2^{44}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{250809622574795696870727 \cdot 2^{37}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{345407397623148373039981 \cdot 2^{40}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{172703693663660745273929 \cdot 2^{41}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{402972198794444701095253 \cdot 2^{67}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{351130483236517776238005 \cdot 2^{78}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{391156699584860217841069 \cdot 2^{64}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{259055573950449221145161 \cdot 2^{64}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{399839422410951719480021 \cdot 2^{68}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{403073631826605087829333 \cdot 2^{72}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{409174892792644777892533 \cdot 2^{76}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{268650182136584290871979 \cdot 2^{41}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{268650182136584738264407 \cdot 2^{77}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{260384022686229936689849 \cdot 2^{73}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{184717527618430669524679 \cdot 2^{14}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{184535596135017972135483 \cdot 2^{58}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{172724852851046795294425 \cdot 2^{77}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{174368558539503924251099 \cdot 2^{76}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
81	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{174094689114602506309083 \cdot 2^{71}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{203584480570919193127623 \cdot 2^{73}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{345407377033693631311287 \cdot 2^{41}}$
	$x^{1099511627779}$	Welch	$x^{140004276903906133348111 \cdot 2^{47}}$
	$x^{1099512676351}$	Niho	$x^{384307534706158251 \cdot 2^{62}}$
	$x^{1208925819614629174706175}$	Inverse	$x^{1208925819614629174706175 \cdot 2^2}$
83	$x^3$	Gold ( $i = 1$ )	$x^{3223802185639011132549803 \cdot 2^{82}}$
	$x^5$	Gold ( $i = 2$ )	$x^{1934281311383406679529883 \cdot 2^{80}}$
	$x^9$	Gold ( $i = 3$ )	$x^{1074600728546337044183271 \cdot 2^{78}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{1706718804161829423114605 \cdot 2^{77}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{1465364629835914151159003 \cdot 2^{77}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{148790870106415898425407 \cdot 2^{72}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{74972143852070026338431 \cdot 2^{70}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{1392381488739028154525403 \cdot 2^{74}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{1451653615755578112317875 \cdot 2^{67}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{1387021233040784301906797 \cdot 2^{71}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{1562340444284791632320181 \cdot 2^{62}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{1612294527306403175640405 \cdot 2^{61}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{936094885833663796452583 \cdot 2^{68}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{590259783760575741951 \cdot 2^{56}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{1599357689643669443144405 \cdot 2^{54}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{537308562700992090010055 \cdot 2^{52}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{1450714672858222468641587 \cdot 2^{53}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{1422127862631295223556461 \cdot 2^{59}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{1446904505158226376314267 \cdot 2^{61}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{1381632143377644991133403 \cdot 2^{62}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{4611683819406229503 \cdot 2^{42}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{935943760136466180198003 \cdot 2^{40}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{283896510372793298992671 \cdot 2^{42}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{967022654182740269098803 \cdot 2^{38}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{18815966624800407748863 \cdot 2^{34}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{146536465167154871827487 \cdot 2^{32}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{967140662897462756979507 \cdot 2^{30}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{1611901098824305114174805 \cdot 2^{29}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
83	$x^{536870913}$	Gold ( $i = 29$ )	$x^{284453134556806836588303 \cdot 2^{30}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{965266352104129496401523 \cdot 2^{33}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{4717759298253968376831 \cdot 2^{32}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{1599501782703616024992437 \cdot 2^{40}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{1611888795177774509380949 \cdot 2^{35}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{533348541200048855682831 \cdot 2^{38}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{1564474873391661341582765 \cdot 2^{41}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{940210017031030016195015 \cdot 2^{39}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{1608746687585053301975893 \cdot 2^{38}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{533069652761189240923079 \cdot 2^{39}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{1559904283378254983116205 \cdot 2^{41}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{1381629508136031109962605 \cdot 2^{41}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{4398046511103 \cdot 2^{42}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{743954350532079492127035 \cdot 2^{72}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{848368996220792403302867 \cdot 2^{69}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{200651588317780775884843 \cdot 2^{76}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{418802096623799029304053 \cdot 2^{76}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{712226071759077341706391 \cdot 2^{73}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{594907212703403605887 \cdot 2^{42}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{1448762805718228422731469 \cdot 2^{47}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{1450712831814845525183667 \cdot 2^{31}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{1424177587256649214810477 \cdot 2^{48}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{50395735813871285699243 \cdot 2^{67}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{1611113935685702948400469 \cdot 2^{37}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{857937834955518099164259 \cdot 2^{59}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{72061992084422655 \cdot 2^0}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{1599209539247919653546709 \cdot 2^{77}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{551440494876704661723603 \cdot 2^{53}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{371988527130198069956293 \cdot 2^{52}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{1422404563800681563761965 \cdot 2^{59}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{732682037605402368175261 \cdot 2^{77}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{1457335266191098189231707 \cdot 2^{65}}$
$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{1381632143377644991133405 \cdot 2^{19}}$	
$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{997370949240862270934323 \cdot 2^8}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
83	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{1947857286409899222255 \cdot 2^{10}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{741049697138103718061923 \cdot 2^{80}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{865543626429312073807593 \cdot 2^{20}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{8792193336893793148560605 \cdot 2^{24}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{1934281311383406733216973 \cdot 2^1}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{12009599006321323 \cdot 2^{28}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{568906276531307145500311 \cdot 2^{26}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{374860719260418318459515 \cdot 2^{70}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{688792859473937997309367 \cdot 2^{22}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{1561732145135731178298069 \cdot 2^{14}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{1611925688384446951773525 \cdot 2^{52}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{837720390798927844560539 \cdot 2^{56}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{1403932934023145202300333 \cdot 2^{80}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{169343699623203535522043 \cdot 2^{34}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{3148232335770383198891 \cdot 2^{10}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{80238765529650682676215 \cdot 2^{70}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{1564626794116775306245301 \cdot 2^{36}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{198727531991506138945003 \cdot 2^4}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{690814754065816531725751 \cdot 2^2}$
	$x^{2199023255555}$	Welch	$x^{568906268057047644457803 \cdot 2^{40}}$
$x^{4611688217450643455}$	Niho	$x^{1537230138824633003 \cdot 2^{63}}$	
$x^{4835703278458516698824703}$	Inverse	$x^{4835703278458516698824703 \cdot 2^2}$	
85	$x^3$	Gold ( $i = 1$ )	$x^{12895208742556044530199211 \cdot 2^{84}}$
	$x^5$	Gold ( $i = 2$ )	$x^{7737125245533626718119527 \cdot 2^{83}}$
	$x^9$	Gold ( $i = 3$ )	$x^{4298402914185348176733071 \cdot 2^{82}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{6826875216647317692458413 \cdot 2^{78}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{595163480425663593701503 \cdot 2^{79}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{299888575408280105353471 \cdot 2^{78}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{3763193212808184201420007 \cdot 2^{75}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{6259077927673401731032493 \cdot 2^{69}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{5531912388827117199632091 \cdot 2^{65}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{6449178109225612702559573 \cdot 2^{62}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{6398025575307008545741493 \cdot 2^{67}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{2361039135042302935039 \cdot 2^{71}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
85	$x^{65537}$	Gold ( $i = 16$ )	$x^{586154795673809552735263 \cdot 2^{54}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{5568386711356698334031003 \cdot 2^{56}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{6435023715815448347323221 \cdot 2^{58}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{18446735277620723711 \cdot 2^{64}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{5526523303021069276207981 \cdot 2^{42}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{5787614534642752251812275 \cdot 2^{41}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{5801899576202084694465331 \cdot 2^{39}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{3748607194837845318354547 \cdot 2^{34}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{2133398506261957279944463 \cdot 2^{35}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{6447604395297220322481493 \cdot 2^{30}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{5802843937753099767329587 \cdot 2^{31}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{6397428461808960614509269 \cdot 2^{32}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{18871028190210372405247 \cdot 2^{43}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{1135657518253067665423903 \cdot 2^{43}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{2148939071404862795736007 \cdot 2^{40}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{5688506836744669558828333 \cdot 2^{38}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{3860992050190026634323763 \cdot 2^{39}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{2132278610978266811713423 \cdot 2^{43}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{5526518032529045423240923 \cdot 2^{43}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{8796093022207 \cdot 2^{43}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{2975817402128317968507515 \cdot 2^{79}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{3393475984883169613210323 \cdot 2^{77}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{802606353271123103539371 \cdot 2^{77}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{3443625047293047349159129 \cdot 2^{58}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{2379628850813073358719 \cdot 2^{64}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{3383162637425246479162547 \cdot 2^{38}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{6257971123037242708505773 \cdot 2^{33}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{3443575578740794596308557 \cdot 2^{34}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{6444455742742811776822613 \cdot 2^{50}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{6244530220121750386858645 \cdot 2^{47}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{144123984168861695 \cdot 2^{43}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{2844253274116409216252055 \cdot 2^{17}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{1655731522740350471211637 \cdot 2^{73}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{12593001259937814457003 \cdot 2^{29}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
85	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{2763261651510534637055415 \cdot 2^{23}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{794910191139444147082731 \cdot 2^{23}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{2929593404762728861723805 \cdot 2^{70}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{1487364167325607654810309 \cdot 2^{27}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{1499442877041400793121915 \cdot 2^{83}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{2275625140034684599849683 \cdot 2^{29}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{48038396025285291 \cdot 2^{29}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{7737125245533627577112987 \cdot 2^{82}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{6472692326030145278528213 \cdot 2^{72}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{3455086364493172221523785 \cdot 2^{14}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{40137737348915409731567 \cdot 2^{15}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{3351021293899154149665235 \cdot 2^{79}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{5622947397513993750530413 \cdot 2^{72}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{3876118416331090500072243 \cdot 2^{68}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{320955053186131647547383 \cdot 2^{82}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{5829340938450448551876301 \cdot 2^{40}}$
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{5526518032529045423240925 \cdot 2^{84}}$
	$x^{4398046511107}$	Welch	$x^{2275625072414460783007375 \cdot 2^{36}}$
	$x^{4398048608255}$	Niho	$x^{6148914691237915307 \cdot 2^{43}}$
	$x^{19342813113834066795298815}$	Inverse	$x^{19342813113834066795298815 \cdot 2^{-2}}$
$x^{295150156996346511359}$	Dobbertin	$x^{6447628967124438627308885 \cdot 2^1}$	
87	$x^3$	Gold ( $i = 1$ )	$x^{51580834970224178120796843 \cdot 2^{86}}$
	$x^5$	Gold ( $i = 2$ )	$x^{30948500982134506872478107 \cdot 2^{84}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{9102500288863090256611215 \cdot 2^{80}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{23445834077374626418544027 \cdot 2^{79}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{22791531731029288006863725 \cdot 2^{78}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{25890769304120307305769685 \cdot 2^{73}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{8605192956008131179176903 \cdot 2^{71}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{75520988243373613647871 \cdot 2^{66}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{4551805649148307186786063 \cdot 2^{66}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{22108770460536124683695835 \cdot 2^{72}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{15444263921459771537679987 \cdot 2^{58}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{23211434765731559498167091 \cdot 2^{55}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{15043364886144985692846311 \cdot 2^{63}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
87	$x^{1048577}$	Gold ( $i = 20$ )	$x^{25587380515638602330102453 \cdot 2^{62}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{36893479351330275327 \cdot 2^{44}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{14975083500612422640835815 \cdot 2^{44}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{25787270009498314459491669 \cdot 2^{39}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{301053164639907361980927 \cdot 2^{44}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{8596805860396293718569415 \cdot 2^{32}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{1190326961405616388829247 \cdot 2^{32}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{24960901133269316605879725 \cdot 2^{34}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{22756242041601903202757933 \cdot 2^{39}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{25790220720592575156409685 \cdot 2^{36}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{15472361314002408393041715 \cdot 2^{40}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{2343438032636692387658783 \cdot 2^{39}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{23150453490581921675529627 \cdot 2^{44}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{24958468534015760378025653 \cdot 2^{42}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{17592186044415 \cdot 2^{44}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{11903269608513271874030043 \cdot 2^{82}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{16052127065422462070787671 \cdot 2^{71}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{11064167017782225518425817 \cdot 2^{61}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{22111511281755077648018797 \cdot 2^{64}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{25588537867231047452043989 \cdot 2^{49}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{16117961514422861898805703 \cdot 2^{44}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{16571455977568012881063497 \cdot 2^{46}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{16049614021287462406237751 \cdot 2^{47}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{11053036106226319359849033 \cdot 2^{46}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{11810097950558706598760103 \cdot 2^{80}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{11159311001051078586110267 \cdot 2^{76}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{12897307576122823792030151 \cdot 2^{62}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{25592029095145726892919509 \cdot 2^{82}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{16579556732822153078805065 \cdot 2^{68}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{13029549718260027278731975 \cdot 2^{10}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{25796712436902519512935765 \cdot 2^{76}}$
$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{16590327037206609141214665 \cdot 2^{82}}$	
$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{17193611656741393184150871 \cdot 2^{86}}$	
$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{16664577451918614454769081 \cdot 2^{77}}$	



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
87	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{22623182437947218219931061 \cdot 2^{15}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{22151945147706314832047533 \cdot 2^{58}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{25790515868497745919300949 \cdot 2^{54}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{11810241264714162629277243 \cdot 2^{83}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{16069704583093241911153081 \cdot 2^{73}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{11142060094399907476164315 \cdot 2^{86}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{25034028704709484276798645 \cdot 2^{78}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{22106072130103615845789111 \cdot 2^{44}}$
	$x^{8796093022211}$	Welch	$x^{9102500288869299263450413 \cdot 2^{43}}$
	$x^{36893496943512125439}$	Niho	$x^{24595658764947466923 \cdot 2^{44}}$
	$x^{77371252455336267181195263}$	Inverse	$x^{77371252455336267181195263 \cdot 2^2}$
	89	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{123794003928538027489912423 \cdot 2^{87}}$
$x^9$		Gold ( $i = 3$ )	$x^{68774446626965570827729127 \cdot 2^{84}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{36410001155452361026444831 \cdot 2^{85}}$
$x^{33}$		Gold ( $i = 5$ )	$x^{18756667261899701134835231 \cdot 2^{80}}$
$x^{65}$		Gold ( $i = 6$ )	$x^{104748772554916792491464373 \cdot 2^{79}}$
$x^{129}$		Gold ( $i = 7$ )	$x^{62376823684922261913521779 \cdot 2^{78}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{103563077216481229223078613 \cdot 2^{74}}$
$x^{513}$		Gold ( $i = 9$ )	$x^{1206569239069571418030591 \cdot 2^{72}}$
$x^{1025}$		Gold ( $i = 10$ )	$x^{103262315472097574150122325 \cdot 2^{71}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{302083952973494454587391 \cdot 2^{78}}$
$x^{4097}$		Gold ( $i = 12$ )	$x^{92611330739802063523696027 \cdot 2^{69}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{92849280378477502615100211 \cdot 2^{67}}$
$x^{16385}$		Gold ( $i = 14$ )	$x^{99843622942668906516886957 \cdot 2^{72}}$
$x^{32769}$		Gold ( $i = 15$ )	$x^{18888889488317926637567 \cdot 2^{60}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{92604193701215752898271667 \cdot 2^{59}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{100127572623530086168374573 \cdot 2^{57}}$
$x^{262145}$		Gold ( $i = 18$ )	$x^{103162063469487401229571413 \cdot 2^{55}}$
$x^{524289}$		Gold ( $i = 19$ )	$x^{4761316924861992764174399 \cdot 2^{58}}$
$x^{1048577}$		Gold ( $i = 20$ )	$x^{61776168527124332266022707 \cdot 2^{61}}$
$x^{2097153}$		Gold ( $i = 21$ )	$x^{99834026470247798650099381 \cdot 2^{64}}$
$x^{4194305}$		Gold ( $i = 22$ )	$x^{147573917405312712703 \cdot 2^{67}}$
$x^{8388609}$		Gold ( $i = 23$ )	$x^{88424309602375019279529691 \cdot 2^{45}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
89	$x^{16777217}$	Gold ( $i = 24$ )	$x^{34116476367574265043739591 \cdot 2^{42}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{60173443395828861501323719 \cdot 2^{42}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{34134306670581154255964047 \cdot 2^{45}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{88510304369734568310940891 \cdot 2^{37}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{89094169511492088038059163 \cdot 2^{35}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{92845503004049595874620211 \cdot 2^{33}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{103161670036525148471121237 \cdot 2^{31}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{91025002897108266633735469 \cdot 2^{32}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{91016182636447923600836973 \cdot 2^{37}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{88467422319697691646511981 \cdot 2^{34}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{59910035804369387639741671 \cdot 2^{45}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{34387157726060214050419143 \cdot 2^{39}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{61896529728521453577909043 \cdot 2^{37}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{2399035388299466650927231 \cdot 2^{38}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{103149075426307376832752981 \cdot 2^{40}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{9373752129437920399587391 \cdot 2^{45}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{18169374353785650195341071 \cdot 2^{41}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{102349373326814961304689333 \cdot 2^{43}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{59900324481623297166528115 \cdot 2^{43}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{88424288520424516060896109 \cdot 2^{44}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{35184372088831 \cdot 2^{45}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{47613078434053087496120163 \cdot 2^{86}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{10859123151626142762275319 \cdot 2^{72}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{53935146939819472557854363 \cdot 2^{68}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{623333353114491579039711 \cdot 2^{60}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{3223002829778451000853163 \cdot 2^{78}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{49838946651429008422308963 \cdot 2^{76}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{102354151468924191947205333 \cdot 2^{42}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{55243676939363377423660745 \cdot 2^{39}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{201487444261204289301163 \cdot 2^{70}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{44233711123820048806389175 \cdot 2^{68}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{92837710984511183823228115 \cdot 2^{50}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{46868760791304790073792699 \cdot 2^{45}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{89850486759519273931420837 \cdot 2^{48}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
89	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{1152956688978903039 \cdot 2^0}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{23759675969007815855530629 \cdot 2^3}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{6420841028658072277135445 \cdot 2^5}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{103160882882370300625507669 \cdot 2^1}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{43165211787084177607079063 \cdot 2^2}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{62017894661578922172035891 \cdot 2^{61}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{99989716987980340835030197 \cdot 2^{75}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{88424309602392611465574107 \cdot 2^{67}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{92739515434731732514740813 \cdot 2^{73}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{35271086163521561601630931 \cdot 2^{77}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{54285011792892629090781795 \cdot 2^2}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{2718829327726531510831095 \cdot 2^{23}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{26492880218169616794708757 \cdot 2^3}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{56270037561202761507878493 \cdot 2^{24}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{123794003928538028348905883 \cdot 2^{88}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{192153584101141163 \cdot 2^{30}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{109230003466357087121656653 \cdot 2^{84}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{91166126924117154158291373 \cdot 2^{83}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{12681337023795103447668203 \cdot 2^{24}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{54168380552024983706639667 \cdot 2^{14}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{53616930917203644999592403 \cdot 2^{61}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{23806584625435861580230971 \cdot 2^{56}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{19037035362877521788799 \cdot 2^{60}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{103149080037993257821189461 \cdot 2^{78}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{55097710365693620283204829 \cdot 2^{37}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{35841097057868519644239511 \cdot 2^{37}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{102368262801752539628133077 \cdot 2^{84}}$
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{21666878646249175113385083 \cdot 2^{80}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{93269455014898711102118733 \cdot 2^{84}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{44212144260194665844403639 \cdot 2^2}$
	$x^{17592186044419}$	Welch	$x^{31858751011021592023994127 \cdot 2^{48}}$
	$x^{17592190238719}$	Niho	$x^{24595664629008083627 \cdot 2^{68}}$
$x^{309485009821345068724781055}$	Inverse	$x^{309485009821345068724781055 \cdot 2^2}$	
91	$x^3$	Gold ( $i = 1$ )	$x^{825293359523586849932749483 \cdot 2^{90}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
91	$x^5$	Gold ( $i = 2$ )	$x^{495176015714152109959649691 \cdot 2^{88}}$
	$x^9$	Gold ( $i = 3$ )	$x^{275097786507862283310916495 \cdot 2^{88}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{436920013865428332317337965 \cdot 2^{85}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{75026669047598804539340863 \cdot 2^{86}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{418995090219667169965857461 \cdot 2^{80}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{240844365619723788890880231 \cdot 2^{78}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{4826276956278285672121343 \cdot 2^{82}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{413049261888390296600488789 \cdot 2^{72}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{354042392884935500776421083 \cdot 2^{79}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{239913202634267009585041011 \cdot 2^{68}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{7555557953271706484735 \cdot 2^{76}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{399354995049689637485991605 \cdot 2^{60}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{37495303807519166352717887 \cdot 2^{63}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{412648253877949604918154581 \cdot 2^{56}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{136537521694554720347590415 \cdot 2^{61}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{371321683611328853123635635 \cdot 2^{64}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{353697491393348433543093101 \cdot 2^{67}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{295147869994989125631 \cdot 2^{46}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{39933534627269454767502765 \cdot 2^{45}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{247103500449070704841516659 \cdot 2^{44}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{355068000139918967200959341 \cdot 2^{45}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{72820002446542546140073743 \cdot 2^{34}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{412646680146100593347614037 \cdot 2^{32}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{247588007972368205655257907 \cdot 2^{32}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{370444178423610879148977307 \cdot 2^{36}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{411843865210008058755099349 \cdot 2^{35}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{604167905982156113971199 \cdot 2^{35}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{371381775669091382274405171 \cdot 2^{40}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{240710300840936207027171783 \cdot 2^{40}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{9596141544225577908535551 \cdot 2^{46}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{364064437542717655435929965 \cdot 2^{45}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{72677497414049750773939743 \cdot 2^{46}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{239601297926238953203277031 \cdot 2^{46}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{353697154081577432110708443 \cdot 2^{46}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
91	$x^{35184372088833}$	Gold ( $i = 45$ )	$x^{70368744177663 \cdot 2^{46}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{190452313736212349984480651 \cdot 2^{87}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{43436492606504571049092087 \cdot 2^{82}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{359567646265463150385638829 \cdot 2^{73}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{2493333412457966313996255 \cdot 2^{76}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{12892011319113804003412651 \cdot 2^{79}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{219556529079611721983282275 \cdot 2^{58}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{177538713213035200738305207 \cdot 2^{65}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{805949777044817157204651 \cdot 2^{71}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{101152281565087019530783477 \cdot 2^{45}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{245653269070070654428629811 \cdot 2^{39}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{2305913377957838847 \cdot 2^{46}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{399335506064716500902270645 \cdot 2^{87}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{182334595565303484595353751 \cdot 2^{19}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{412645892703715369350288725 \cdot 2^{75}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{10270853248775149330663415 \cdot 2^{88}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{371381893784098141041904947 \cdot 2^{84}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{364598778946335062554352205 \cdot 2^{74}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{176848598122756811458833847 \cdot 2^{24}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{400507859870538662925481141 \cdot 2^{78}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{189704011696340603030531171 \cdot 2^{17}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{50725349103002529037243435 \cdot 2^{31}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{145640006792014629248079511 \cdot 2^{30}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{768614336404564651 \cdot 2^{31}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{495176015714152110818643149 \cdot 2^{90}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{225080008260780902933752989 \cdot 2^{26}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{414252308865926012125686485 \cdot 2^{76}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{221125490452080481467742025 \cdot 2^{15}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{187476519037736568178202939 \cdot 2^{63}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{216503768482834966417152467 \cdot 2^{63}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{75853002588711131545471 \cdot 2^{84}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{364135568331848576391785773 \cdot 2^{74}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{215701709289533776296307869 \cdot 2^{35}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{86667514576304795780089083 \cdot 2^{89}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
91	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{373077820058638600651978333 \cdot 2^{90}}$
	$x^{1237940039285345090527035393}$	Kasami ( $i = 45$ )	$x^{3536971540815774321110708445 \cdot 2^{90}}$
	$x^{35184372088835}$	Welch	$x^{141088754477378287040401167 \cdot 2^{51}}$
	$x^{295147940363724914687}$	Niho	$x^{98382658516032334507 \cdot 2^{69}}$
	$x^{1237940039285380274899124223}$	Inverse	$x^{1237940039285380274899124223 \cdot 2^2}$
93	$x^3$	Gold ( $i = 1$ )	$x^{3301173438094347399730997931 \cdot 2^{92}}$
	$x^5$	Gold ( $i = 2$ )	$x^{1980704062856608439838598759 \cdot 2^{91}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{1747680055461713329269351853 \cdot 2^{86}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{1500533380951976090786817243 \cdot 2^{87}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{998029178958756190616348275 \cdot 2^{80}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{1425798644468764830234010843 \cdot 2^{79}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{550732349184520395467318215 \cdot 2^{74}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{1599836614947626631494817461 \cdot 2^{78}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{1485588486055640041841597235 \cdot 2^{69}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{290728914932569014208839199 \cdot 2^{75}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{1414874966852802601752386413 \cdot 2^{62}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{1647375534338217398465047253 \cdot 2^{61}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{990353920371294494947488563 \cdot 2^{58}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{7617169872569466567232127 \cdot 2^{67}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{958406410379741366375272051 \cdot 2^{67}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{1180591479979939725311 \cdot 2^{70}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{545863343001295011501557647 \cdot 2^{47}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{1456257823993610601883069741 \cdot 2^{42}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{9652553948515136790331903 \cdot 2^{38}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{149981197071701539092164671 \cdot 2^{41}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{962842252809543588998050247 \cdot 2^{35}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{1481667025577714627642169779 \cdot 2^{36}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{2416671335768582696996863 \cdot 2^{47}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{1650583570814861408681547093 \cdot 2^{39}}$
$x^{274877906945}$	Gold ( $i = 38$ )	$x^{291277786954568981081427727 \cdot 2^{39}}$	
$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{1650385206816413879873746261 \cdot 2^{41}}$	
$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{962775057421821940804827367 \cdot 2^{47}}$	
$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{1637589973228471998244809429 \cdot 2^{44}}$	
$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{1597341986174829503083623853 \cdot 2^{46}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
93	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{140737488355327 \cdot 2^{47}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{761809254944849399937922619 \cdot 2^{85}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{1438270585061852601542585773 \cdot 2^{70}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{708106689138062433174927065 \cdot 2^{79}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{755998567387910153730625191 \cdot 2^{65}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{707405144306947286230742729 \cdot 2^{49}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{1031549536923063161053344199 \cdot 2^{47}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{1599762237675530093303911093 \cdot 2^{45}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{714194724007159657313175995 \cdot 2^{47}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{1027175297073550286391702073 \cdot 2^{49}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{1414788626867306341991111533 \cdot 2^{91}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{1637666275351256642507614805 \cdot 2^1}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{755857654196206892421903675 \cdot 2^{83}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{1057011503665768487934661049 \cdot 2^{70}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{833882034373124479201283751 \cdot 2^{71}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{1061091483326612430804783689 \cdot 2^{73}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{1032154260071819015904007623 \cdot 2^{11}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{1417724489435190304774385069 \cdot 2^{87}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{1061780930381222882159455689 \cdot 2^{86}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{1066532956922789162027537081 \cdot 2^{91}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{1100391146031449135152540331 \cdot 2^{91}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{714288989529186313766718939 \cdot 2^{83}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{1061177793012031133571575369 \cdot 2^{73}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{1650593015529812749462492501 \cdot 2^{58}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{1027175610992934614030134871 \cdot 2^{67}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{1650385280603389624956138837 \cdot 2^{41}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{825427684870734820905087431 \cdot 2^{76}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{1637892204827486445565733589 \cdot 2^{44}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{1602177837031735412724766133 \cdot 2^{90}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{1414788616326209201665437111 \cdot 2^{47}}$
	$x^{70368744177667}$	Welch	$x^{436920013865434541324177167 \cdot 2^{49}}$
	$x^{70368752566271}$	Niho	$x^{393530540239142693547 \cdot 2^{47}}$
	$x^{4951760157141521099596496895}$	Inverse	$x^{4951760157141521099596496895 \cdot 2^2}$
95	$x^3$	Gold ( $i = 1$ )	$x^{13204693752377389598923991723 \cdot 2^{94}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
95	$x^5$	Gold ( $i = 2$ )	$x^{7922816251426433759354395035 \cdot 2^{92}}$
	$x^9$	Gold ( $i = 3$ )	$x^{4401564584125796532974663911 \cdot 2^{90}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{2330240073948951105692469135 \cdot 2^{88}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{609447403955879519950338111 \cdot 2^{84}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{5834632123143497729757112685 \cdot 2^{82}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{154140393996623224890163455 \cdot 2^{80}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{6409295797937563372577142189 \cdot 2^{83}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{2184671147904311895576004495 \cdot 2^{81}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{9669045949995647741464575 \cdot 2^{72}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{1165262246181966639817170703 \cdot 2^{70}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{385140259033325901327907271 \cdot 2^{73}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{604453686576013073514495 \cdot 2^{64}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{2183605602090284952329511879 \cdot 2^{62}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{5702027992429259094045715611 \cdot 2^{61}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{6599126223783104442068020053 \cdot 2^{65}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{6550364652460954621205375701 \cdot 2^{67}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{5659155814552001233755682523 \cdot 2^{71}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{2361183100697351028735 \cdot 2^{48}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{6589426580066725925144079061 \cdot 2^{45}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{6601540974839607009592653141 \cdot 2^{42}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{6399195417814582453961643701 \cdot 2^{46}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{3834242300701891326290368743 \cdot 2^{40}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{3961408127557891287262901043 \cdot 2^{34}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{660234687725923472986953045 \cdot 2^{33}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{6408160203427434452816309549 \cdot 2^{35}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{304686792614952233540239487 \cdot 2^{41}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{5661915026155090456295398253 \cdot 2^{47}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{600213066181128300481543199 \cdot 2^{43}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{5927106282352383502711155867 \cdot 2^{43}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{3960924496357591651916870451 \cdot 2^{42}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{5941144575447351608262629811 \cdot 2^{46}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{3953655859322952718222157427 \cdot 2^{46}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{5926516093587269801044924851 \cdot 2^{46}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{5659154465304917228083665773 \cdot 2^{47}}$



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
95	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{281474976710655 \cdot 2^{48}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{3047237019779397599751690555 \cdot 2^{84}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{3474919408520365683927366243 \cdot 2^{91}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{164373781149926011604897775 \cdot 2^{72}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{3526272048428080485505934553 \cdot 2^{63}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{830928320642312207645890603 \cdot 2^{85}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{606824056879219214384895 \cdot 2^{48}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{413503097519150691938647893 \cdot 2^{82}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{2257420089008165261136810703 \cdot 2^{38}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{2830958693380935552231613879 \cdot 2^{73}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{3451207314176079920243567773 \cdot 2^{55}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{3464054982779341928611616979 \cdot 2^{48}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{18447025548686196735 \cdot 2^0}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{3431140914879174114943486355 \cdot 2^{92}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{5934133484793629778881637579 \cdot 2^{84}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{6447607448737769065895253 \cdot 2^{64}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{6551568855914095176827874005 \cdot 2^{67}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{1627976200834009644785855221 \cdot 2^{70}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{5659155814552001233755682525 \cdot 2^{22}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{6589502137352869593860123477 \cdot 2^{10}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{6602749826867742294024041813 \cdot 2^{84}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{6399346459790506526113422005 \cdot 2^1}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{770711377966148144911320315 \cdot 2^{22}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{7922816251426433760213388493 \cdot 2^1}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{3074457345618258603 \cdot 2^{32}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{6990720221846853381754561965 \cdot 2^{88}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{2763773111534701515238651031 \cdot 2^{29}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{5816641023244931833802677069 \cdot 2^{18}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{19946971661511962333872095 \cdot 2^{64}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{1560827933646351952160586357 \cdot 2^3}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{3035334839992104064995698531 \cdot 2^{92}}$
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{5942112661728810590370843955 \cdot 2^{35}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{1525851814713849688561214075 \cdot 2^{82}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{3001103109837504184691387549 \cdot 2^{43}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
95	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{5969245120938001684422121837 \cdot 2^{47}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{2829577232652317876553477559 \cdot 2^2}$
	$x^{140737488355331}$	Welch	$x^{2330240073952130117194142415 \cdot 2^{42}}$
	$x^{2361183382172310962175}$	Niho	$x^{1574122160956553996971 \cdot 2^{48}}$
	$x^{19807040628566084398385987583}$	Inverse	$x^{19807040628566084398385987583 \cdot 2^2}$
	$x^{7555800784137727706239}$	Dobbertin	$x^{6602353172689348247568471381 \cdot 2^1}$
97	$x^3$	Gold ( $i = 1$ )	$x^{52818775009509558395695966891 \cdot 2^{96}}$
	$x^5$	Gold ( $i = 2$ )	$x^{31691265005705735037417580135 \cdot 2^{95}}$
	$x^9$	Gold ( $i = 3$ )	$x^{17606258336503186131898655631 \cdot 2^{94}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{9320960295795804422769876511 \cdot 2^{93}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{24008534095231617452589075867 \cdot 2^{89}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{2437789615823518079801352319 \cdot 2^{91}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{1228343604872315311527813247 \cdot 2^{84}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{616561575986492899560653311 \cdot 2^{89}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{23783892840539391792213973427 \cdot 2^{83}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{22724955882140210002440899437 \cdot 2^{78}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{15853365852048988976746227507 \cdot 2^{78}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{38676183799982590965850111 \cdot 2^{85}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{26206312756457507003357026997 \cdot 2^{73}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{26410999307470968076651640149 \cdot 2^{71}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{26203876387121880156209507029 \cdot 2^{76}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{2417814746304052293926911 \cdot 2^{81}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{15335107024229904288054890099 \cdot 2^{64}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{23300142901351140942748019053 \cdot 2^{66}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{15845662725940711919159030579 \cdot 2^{60}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{15405478143267834209550365127 \cdot 2^{63}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{22807961426484712570160375003 \cdot 2^{70}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{4651378760924033664149233423 \cdot 2^{67}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{15334485504627120783142132967 \cdot 2^{72}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{9444732402789370560511 \cdot 2^{73}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{22636620559713434816549935981 \cdot 2^{48}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{23706064523082759673691426203 \cdot 2^{49}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{2399681135715778963540343839 \cdot 2^{44}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{23768206998631069480151259955 \cdot 2^{45}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
97	$x^{536870913}$	Gold ( $i = 29$ )	$x^{154440568316006081003783167 \cdot 2^{49}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{15814923912874057651996903027 \cdot 2^{40}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{23302400741659716242130152749 \cdot 2^{36}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{26409387510903693889800328533 \cdot 2^{34}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{23768448755201638482178159411 \cdot 2^{35}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{4651653480959860135278181407 \cdot 2^{39}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{15404405625037813917206124775 \cdot 2^{41}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{22639379771645849742210574043 \cdot 2^{38}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{25559962751244970018074834349 \cdot 2^{48}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{25632639702301884737806249261 \cdot 2^{44}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{26409337132893667075950466389 \cdot 2^{40}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{25596781666718666773748208309 \cdot 2^{41}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{8738382498445403590048057231 \cdot 2^{49}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{8802054436348201826726244807 \cdot 2^{43}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{26396485996452125847989168981 \cdot 2^{45}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{26357705728818180650503088853 \cdot 2^{46}}$
	$x^{35184372088833}$	Gold ( $i = 45$ )	$x^{8733813190551094147132023751 \cdot 2^{46}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{25557471778796109830079305397 \cdot 2^{47}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{22636617861218703855271655131 \cdot 2^{49}}$
	$x^{281474976710657}$	Gold ( $i = 48$ )	$x^{562949953421311 \cdot 2^{49}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{12188948079117590399006761595 \cdot 2^{91}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{13899677634081462735709465043 \cdot 2^{85}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{657495124599704046419451887 \cdot 2^{85}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{6861653551084323296118143605 \cdot 2^{68}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{11669111959700723166517507223 \cdot 2^{80}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{14103850791430214245907506905 \cdot 2^{66}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{2427296227516868234051327 \cdot 2^{73}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{11998403317395670974796721309 \cdot 2^{53}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{23333725589612940734921660781 \cdot 2^{55}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{15837895379452909020146512691 \cdot 2^{45}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{14147195685942852347574990409 \cdot 2^{40}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{412697838829602686535988565 \cdot 2^{20}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{26406163604192510659531552085 \cdot 2^{43}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{26201439646016719488537684693 \cdot 2^{46}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
97	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{36894051097372459007 \cdot 2^{49}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{12778716390593967953600941155 \cdot 2^{18}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{3323751059176120788369627179 \cdot 2^{22}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{12141334932572525574294481211 \cdot 2^{88}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{13896962871416692937348299347 \cdot 2^{90}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{14105013637864029136990320221 \cdot 2^{93}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{9175320256518530944594253463 \cdot 2^{94}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{16340340116998851995190795443 \cdot 2^{72}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{11318310279856717408266579383 \cdot 2^{26}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{23876997044374613854516566861 \cdot 2^{17}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{23766529588201190645565934803 \cdot 2^{80}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{79787886628033729994489823 \cdot 2^{92}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{6094660005445514313234603717 \cdot 2^{16}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{11285182246478494648362673335 \cdot 2^{31}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{6141718024361576625825833595 \cdot 2^{91}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{27962880887387413272351951693 \cdot 2^{96}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{12297829382473034411 \cdot 2^{33}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{31691265005705735051161475483 \cdot 2^{94}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{14405120475026722306065131933 \cdot 2^{28}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{3082807898307431357218228475 \cdot 2^{25}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{23741382032092884966732306125 \cdot 2^{79}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{1653709586810915483739144021 \cdot 2^{70}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{23002056078047262897477105069 \cdot 2^{69}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{26409412690757392852834932053 \cdot 2^{60}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{25558105489835649839529679541 \cdot 2^{64}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{13725173105071253085401599643 \cdot 2^{89}}$
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{1390116230571225082704176119 \cdot 2^{88}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{25790429776936673463326037 \cdot 2^{76}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{26358007961425997016310524757 \cdot 2^{37}}$
	$x^{1237940039285345090527035393}$	Kasami ( $i = 45$ )	$x^{9029697925989467341507388115 \cdot 2^{47}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{25634845392506709940675172021 \cdot 2^{47}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{6511903768299647341608430357 \cdot 2^{92}}$
$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{22636617861218703855271655133 \cdot 2^{96}}$	
$x^{281474976710659}$	Welch	$x^{9175320291173996530915806991 \cdot 2^{55}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
97	$x^{281474993487871}$	Niho	$x^{1574122254781540641451 \cdot 2^{74}}$
	$x^{79228162514264337593543950335}$	Inverse	$x^{79228162514264337593543950335 \cdot 2^2}$
99	$x^3$	Gold ( $i = 1$ )	$x^{211275100038038233582783867563 \cdot 2^{98}}$
	$x^5$	Gold ( $i = 2$ )	$x^{126765060022822940149670320539 \cdot 2^{96}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{111851523549549653073238518125 \cdot 2^{93}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{19206827276185293962071260703 \cdot 2^{90}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{4913374419489261246111252735 \cdot 2^{92}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{91251113246000949134976689883 \cdot 2^{90}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{618366146452794829998392319 \cdot 2^{80}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{61347914437994990564316224743 \cdot 2^{76}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{105643997229883872306606552405 \cdot 2^{72}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{90551997878579366512150633325 \cdot 2^{81}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{90547853063840743490367108827 \cdot 2^{67}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{34953605553806008408982654735 \cdot 2^{65}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{105637650762741341310065399125 \cdot 2^{61}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{94824276535586852859332581811 \cdot 2^{71}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{18889465368528660987903 \cdot 2^{50}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{102229891989880603347473061557 \cdot 2^{48}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{63374793122313082749632017203 \cdot 2^{44}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{94833700519871938496820563355 \cdot 2^{50}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{4875579233917404660998860863 \cdot 2^{38}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{61621904179810789692117119431 \cdot 2^{38}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{35212516675056010495163920839 \cdot 2^{35}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{102387163864729657383257330357 \cdot 2^{36}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{77352367600527994496487423 \cdot 2^{38}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{104815467770708544126419561173 \cdot 2^{47}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{95073734570855047473384862515 \cdot 2^{42}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{90897408017516487216075589997 \cdot 2^{42}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{102529425302325668714950012205 \cdot 2^{45}}$
$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{34935252762195865849074796431 \cdot 2^{50}}$	
$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{61337932269110198704486862451 \cdot 2^{48}}$	
$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{112589906842623 \cdot 2^{50}}$	
$x^{13}$	Kasami ( $i = 2$ )	$x^{48755792316470361596027046363 \cdot 2^{94}}$	
$x^{241}$	Kasami ( $i = 4$ )	$x^{92049317443958566498723261869 \cdot 2^{85}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$	
99	$x^{993}$	Kasami ( $i = 5$ )	$x^{65744215419691655767452381881 \cdot 2^{82}}$	
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{67643900824136618428885407161 \cdot 2^{74}}$	
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{45273929235644626301520557769 \cdot 2^{76}}$	
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{67876683702592355206965849545 \cdot 2^{53}}$	
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{52749992429950245262038641095 \cdot 2^{44}}$	
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{105624654416770042637857764693 \cdot 2^{58}}$	
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{90546471529202788329473104749 \cdot 2^{49}}$	
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{45273235743518918409108427337 \cdot 2^1}$	
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{65748228287508895941077470551 \cdot 2^{95}}$	
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{105637348531574668303801341269 \cdot 2^1}$	
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{45637878183258922329548540379 \cdot 2^{73}}$	
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{67909854932902773359003341385 \cdot 2^{77}}$	
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{102539527967781208665460757685 \cdot 2^{12}}$	
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{48374899312929929711384688187 \cdot 2^{95}}$	
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{45328489774186517997632515803 \cdot 2^{28}}$	
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{68258109243058506268268991929 \cdot 2^{95}}$	
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{70425033346012744558136612183 \cdot 2^{95}}$	
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{70425033346012744558136612183 \cdot 2^{95}}$	
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{107262743096234795781908518069 \cdot 2^{90}}$	
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{67915378752769570439169797705 \cdot 2^{77}}$	
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{104815505548487520762272787157 \cdot 2^{85}}$	
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{45708556749735119213052145979 \cdot 2^{65}}$	
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{90549256291685991329723805037 \cdot 2^{66}}$	
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{92046754119920194131391194549 \cdot 2^{40}}$	
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{66057853902775932534397310407 \cdot 2^{92}}$	
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{53368450056916575262650633927 \cdot 2^{94}}$	
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{90546471444874011206867447223 \cdot 2^{50}}$	
	$x^{562949953421315}$	Welch	$x^{37283841183184012443954924363 \cdot 2^{48}}$	
	$x^{18889466494428534276095}$	Niho	$x^{6296489019126162565803 \cdot 2^{75}}$	
	$x^{316912650057057350374175801343}$	Inverse	$x^{316912650057057350374175801343 \cdot 2^2}$	
	101	$x^3$	Gold ( $i = 1$ )	$x^{845100400152152934331135470251 \cdot 2^{100}}$
		$x^5$	Gold ( $i = 2$ )	$x^{507060240091291760598681282151 \cdot 2^{99}}$
		$x^9$	Gold ( $i = 3$ )	$x^{281700133384050978110378490087 \cdot 2^{96}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{447406094198198612292954072493 \cdot 2^{94}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
101	$x^{33}$	Gold ( $i = 5$ )	$x^{76827309104741175848285042751 \cdot 2^{96}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{429050972384939182045038007989 \cdot 2^{91}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{373416455881183854704455207789 \cdot 2^{92}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{246624630394597159824261324007 \cdot 2^{91}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{380542285448630268675423574451 \cdot 2^{85}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{2473464585811179319993567231 \cdot 2^{91}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{253653853632783823627939637043 \cdot 2^{80}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{245671119497489417815079898739 \cdot 2^{85}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{362362712771208746284056992621 \cdot 2^{76}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{246489765781332857684986051015 \cdot 2^{76}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{372840687387459946035131542829 \cdot 2^{76}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{408939514930882188785621849781 \cdot 2^{81}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{19342665541007368435924991 \cdot 2^{68}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{139741620268917481716041631631 \cdot 2^{69}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{19502354124234722362041823295 \cdot 2^{64}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{422550603050965365240261072213 \cdot 2^{62}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{74567717922991234033681108751 \cdot 2^{64}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{410117710655114384392974607789 \cdot 2^{72}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{74421766815165526502415285791 \cdot 2^{74}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{408919587458323921677627864493 \cdot 2^{74}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{75557861474114576842751 \cdot 2^{76}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{362185896573474486143993886427 \cdot 2^{51}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{419223037905894017059691256501 \cdot 2^{49}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{38394888869751673996366182463 \cdot 2^{51}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{422537305654419009331398358357 \cdot 2^{45}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{362538201978363184167656171227 \cdot 2^{51}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{419261871673112042558675299029 \cdot 2^{40}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{379334838705777540240231263387 \cdot 2^{41}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{380295180083226215708408099635 \cdot 2^{37}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{422550200100672125933377115477 \cdot 2^{35}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{139814404437208341989817257743 \cdot 2^{39}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{9826748839121520508564127871 \cdot 2^{37}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{139750749098340629991446864839 \cdot 2^{38}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{309409461179865566193655807 \cdot 2^{51}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
101	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{253038782310841485941116036723 \cdot 2^{49}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{253529999153294503247295755059 \cdot 2^{43}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{140849798041907403787796771271 \cdot 2^{42}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{4932454975960936642173141247 \cdot 2^{43}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{380291311387801303522536430387 \cdot 2^{47}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{364927373377909910466903370907 \cdot 2^{46}}$
	$x^{35184372088833}$	Gold ( $i = 45$ )	$x^{422343775943197967170027564373 \cdot 2^{46}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{421723291661072840756313893717 \cdot 2^{47}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{379297029989550089543801556379 \cdot 2^{51}}$
	$x^{281474976710657}$	Gold ( $i = 48$ )	$x^{245351729076432659283136716007 \cdot 2^{51}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{362185885779496688198845127533 \cdot 2^{50}}$
	$x^{1125899906842625}$	Gold ( $i = 50$ )	$x^{2251799813685247 \cdot 2^{51}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{195023169265881446384108185443 \cdot 2^{98}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{222394842145303403771351439827 \cdot 2^{87}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{368197269775834265994893047213 \cdot 2^{90}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{186381659248057897903845587095 \cdot 2^{92}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{409244007313948594284331227829 \cdot 2^{73}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{372255887647755869025359056173 \cdot 2^{71}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{224825885777522403310746307683 \cdot 2^{87}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{97319642232379767684047397573 \cdot 2^{57}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{226277797626159837191992882889 \cdot 2^{44}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{253406326071246544309453009715 \cdot 2^{47}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{88438340442346469117126427259 \cdot 2^{49}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{373339609425727733810133654093 \cdot 2^{54}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{44392094781342586770344577275 \cdot 2^{57}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{52638134994515538587680856107 \cdot 2^{72}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{408919548765392615996593460917 \cdot 2^{49}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{295150156979166380031 \cdot 2^0}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{219593017957316525899353869723 \cdot 2^{97}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{225642121086370221221660533977 \cdot 2^{92}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{422549998588632018677977142613 \cdot 2^{83}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{5259998618989577582453854191 \cdot 2^{85}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{410122244126940059110798046509 \cdot 2^{94}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{220878512533550732749707570333 \cdot 2^{95}}$



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$	
101	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{26384404562797958243772186453 \cdot 2^{73}}$	
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{362185896573475612043900729051 \cdot 2^{76}}$	
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{382031696020327186063789176413 \cdot 2^{22}}$	
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{6603146529483851916431594837 \cdot 2^7}$	
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{1257273260165478948330930143 \cdot 2^{12}}$	
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{422575988919535493624204277077 \cdot 2^{88}}$	
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{379862112513486018801060914893 \cdot 2^{100}}$	
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{424194364278707114966181563093 \cdot 2^{96}}$	
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{230481928459039644604163058845 \cdot 2^{31}}$	
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{507060240091291760612425177499 \cdot 2^{100}}$	
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{49191317529892137643 \cdot 2^{34}}$	
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{149135364750094512245456425683 \cdot 2^{33}}$	
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{176881479119917150917639382199 \cdot 2^{30}}$	
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{22261181272300614978381038583 \cdot 2^{88}}$	
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{181026632770159632086246958519 \cdot 2^{27}}$	
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{194237565461388152910290709603 \cdot 2^{24}}$	
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{97511770621461841636605014331 \cdot 2^{64}}$	
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{144556817068206003233377507795 \cdot 2^2}$	
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{1941837039973346121875199 \cdot 2^{68}}$	
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{191975653274573481011378247995 \cdot 2^{94}}$	
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{108510021074311538112314313461 \cdot 2^{94}}$	
	$x^{1237940039285345090527035393}$	Kasami ( $i = 45$ )	$x^{206323290713598383465605803 \cdot 2^{12}}$	
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{421728127373574636125495274325 \cdot 2^{84}}$	
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{380302856751228007327570775251 \cdot 2^{44}}$	
	$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{261445440728279000013650631987 \cdot 2^{94}}$	
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{52095230146365622688903058923 \cdot 2^4}$	
	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{181092942889747218199515721143 \cdot 2^2}$	
	$x^{1125899906842627}$	Welch	$x^{149135364732783734948344796815 \cdot 2^{44}}$	
	$x^{1125899940397055}$	Niho	$x^{25185954575304796842667 \cdot 2^{51}}$	
	$x^{1267650600228229401496703205375}$	Inverse	$x^{1267650600228229401496703205375 \cdot 2^2}$	
	103	$x^3$	Gold ( $i = 1$ )	$x^{3380401600608611737324541881003 \cdot 2^{102}}$
		$x^5$	Gold ( $i = 2$ )	$x^{2028240960365167042394725128603 \cdot 2^{100}}$
		$x^9$	Gold ( $i = 3$ )	$x^{1126800533536203912441513960335 \cdot 2^{100}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{596541458930931483057272096655 \cdot 2^{96}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
103	$x^{33}$	Gold ( $i = 5$ )	$x^{1536546182094823516965700855003 \cdot 2^{97}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{1716203889539756728180152031925 \cdot 2^{92}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{1021981879253766339191140568691 \cdot 2^{92}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{1696777457114828459590917909205 \cdot 2^{89}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{1640779724272016223379748398509 \cdot 2^{87}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{1454397176456973440156217531245 \cdot 2^{91}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{559275813863503845267457148815 \cdot 2^{85}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{1517344042840917008772231515547 \cdot 2^{88}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{1237788942002420994992513023 \cdot 2^{78}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{297706408890950670549851323935 \cdot 2^{80}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{1014151427739121181288338715443 \cdot 2^{76}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{1517227109600718895485014563251 \cdot 2^{82}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{77370662164029473743437823 \cdot 2^{86}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{981411907980391056447992208615 \cdot 2^{70}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{985881961178397782366373755111 \cdot 2^{71}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{985950601169141389411222450631 \cdot 2^{66}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{1521180962058923912626393789235 \cdot 2^{65}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{39307004727429837134174863487 \cdot 2^{67}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{1689375708530777488387046288725 \cdot 2^{70}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{558964348806336758339190514631 \cdot 2^{73}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{1448743715821659828258122161005 \cdot 2^{76}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{151115725200028900261887 \cdot 2^{52}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{98140695530332782043643367027 \cdot 2^{50}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{1686893185570650712144937921365 \cdot 2^{48}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{563331493371017865055704773063 \cdot 2^{46}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{298268454118181908536610397967 \cdot 2^{48}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{4946929173925952046266057727 \cdot 2^{42}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{1491209136315562780259067316589 \cdot 2^{44}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{1640489012077423219888762989869 \cdot 2^{39}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{1690200800402688503724918527317 \cdot 2^{36}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{1014120480212098311718733820723 \cdot 2^{36}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{153654618211718320676242750495 \cdot 2^{37}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{1459709531148024182747797595355 \cdot 2^{44}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{1635758021963619806882134906549 \cdot 2^{39}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
103	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{1448920305348443146054426769115 \cdot 2^{52}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{153580745506276688007895578687 \cdot 2^{52}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{1690199994354528073612396418389 \cdot 2^{43}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{1491353078421128472741429456173 \cdot 2^{43}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{19729819902693068084919271935 \cdot 2^{52}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{1690149217895309563251772798293 \cdot 2^{46}}$
	$x^{35184372088833}$	Gold ( $i = 45$ )	$x^{77999743928239312657191530559 \cdot 2^{46}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{1520933011314413872521835813683 \cdot 2^{48}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{1012135899986567597954459133747 \cdot 2^{48}}$
	$x^{281474976710657}$	Gold ( $i = 48$ )	$x^{1676892132585383404511423191733 \cdot 2^{50}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{1635678193842881295969554970029 \cdot 2^{51}}$
	$x^{1125899906842625}$	Gold ( $i = 50$ )	$x^{1448743543117979032338876446427 \cdot 2^{52}}$
	$x^{2251799813685249}$	Gold ( $i = 51$ )	$x^{4503599627370495 \cdot 2^{52}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{780092677063525785536432741771 \cdot 2^{99}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{889579368581213615085405758163 \cdot 2^{95}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{883673447462002238387743313563 \cdot 2^{87}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{1521691354956746673297150340299 \cdot 2^{77}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{1636976029255794377137333164725 \cdot 2^{68}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{1006198151279145733955432272691 \cdot 2^{71}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{1676970417666853925541203258069 \cdot 2^{73}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{1472110999638972895299246667173 \cdot 2^{55}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{1489021416361399890816888625965 \cdot 2^{48}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{577899542786090298600659800783 \cdot 2^{42}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{768273100208176668201758911581 \cdot 2^{37}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{905420505003958526582448830025 \cdot 2^{42}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{587219911949463764887464875671 \cdot 2^{62}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{389998724363563046155602850107 \cdot 2^{46}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{389278530781071646198034686597 \cdot 2^{58}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{590300313958332891135 \cdot 2^{52}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{899622694632725626435834842211 \cdot 2^{20}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{886798112798351017211595168947 \cdot 2^{93}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{177568381485420854199096052215 \cdot 2^{95}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{767903746420849371518058746171 \cdot 2^{90}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{902646146068263614570009536233 \cdot 2^{99}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
103	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{825293457858183507967912619 \cdot 2^{35}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{84136443804037007537958036471 \cdot 2^{73}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{20838093714608997163000035307 \cdot 2^{29}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{724371782352968440014484237751 \cdot 2^{27}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{354991310886755005097907700859 \cdot 2^{13}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{1686902856958724926744936491861 \cdot 2^{86}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{878459796145158711882235570643 \cdot 2^{97}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{21042412014041161312382361583 \cdot 2^{91}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{72225166141574400946666362295 \cdot 2^{32}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{1493665823524735418819951667629 \cdot 2^1}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{1789624376792794449236493444525 \cdot 2^{100}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{196765270119568550571 \cdot 2^{35}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{2028240960365167042408469023949 \cdot 2^{102}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{921927709829302168709074478301 \cdot 2^{29}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{434059349494491018814433889013 \cdot 2^{88}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{1638232693706369811319495481013 \cdot 2^{83}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{903022161449429563357619075661 \cdot 2^{15}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{2553232146558626030252326879 \cdot 2^{18}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{1690202412205014381366138983765 \cdot 2^{64}}$
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{210397797786899222652170098731 \cdot 2^{81}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{77522367027614808654479103 \cdot 2^{95}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{1690149222617676037325324997973 \cdot 2^{90}}$
	$x^{1237940039285345090527035393}$	Kasami ( $i = 45$ )	$x^{707218830509882976133519357079 \cdot 2^{47}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{1521180841181214635001209736499 \cdot 2^{37}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{777027631613787991840431336291 \cdot 2^{93}}$
	$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{26407788198164467145753236821 \cdot 2^{90}}$
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{105537609101588775058551783765 \cdot 2^{94}}$
	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{1528126750960075128334281709261 \cdot 2^{49}}$
	$x^{5070602400912915354186999136257}$	Kasami ( $i = 51$ )	$x^{1448743543117979032338876446429 \cdot 2^{102}}$
	$x^{2251799813685251}$	Welch	$x^{596541458930933072563022933293 \cdot 2^{51}}$
	$x^{151115729703628460523519}$	Niho	$x^{100743818301219120261803 \cdot 2^{52}}$
	$x^{5070602400912917605986812821503}$	Inverse	$x^{5070602400912917605986812821503 \cdot 2^2}$
105	$x^3$	Gold ( $i = 1$ )	$x^{13521606402434446949298167524011 \cdot 2^{104}}$
	$x^5$	Gold ( $i = 2$ )	$x^{8112963841460668169578900514407 \cdot 2^{103}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
105	$x^{17}$	Gold ( $i = 4$ )	$x^{2386165835723725932229088386591 \cdot 2^{101}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{6787109828459313838363671636693 \cdot 2^{90}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{655293077482547868260272256437 \cdot 2^{84}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{4951155768009683979970035711 \cdot 2^{92}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{4048621121427150349971435087475 \cdot 2^{83}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{5795062596085807583383492867803 \cdot 2^{87}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{6747611427834899566242525784917 \cdot 2^{68}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{6069357437591606397837575089307 \cdot 2^{70}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{2253326237968844281367666156487 \cdot 2^{73}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{604462900800115466829823 \cdot 2^{79}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{5964831747061069303696920897901 \cdot 2^{52}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{3930699235776048712451848982131 \cdot 2^{51}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{6543350466679751731783052600749 \cdot 2^{43}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{2253601067203584671630361391559 \cdot 2^{38}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{6708797022747456939864540009141 \cdot 2^{39}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{6083734459574873313561281337779 \cdot 2^{42}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{5838875455326353366649633205403 \cdot 2^{48}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{1190823217855261100987951643679 \cdot 2^{48}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{5817434113111840746690676673389 \cdot 2^{52}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{311998975712385223648577839231 \cdot 2^{53}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{3943526635199530344751978920391 \cdot 2^{50}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{9007199254740991 \cdot 2^{53}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{3120370708254103142145730967099 \cdot 2^{97}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{4207968797438105897084491968087 \cdot 2^{92}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{6707881670667415702164812966613 \cdot 2^{82}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{6552626125518971261902104777397 \cdot 2^{51}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{4345965345697023423072157003337 \cdot 2^{56}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{3095945108206995223926787624615 \cdot 2^{50}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{2897487086404610150266273894985 \cdot 2^{55}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{6747572704429812092746079841109 \cdot 2^{97}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{2900404375380757654749800722139 \cdot 2^{104}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{4225536387988181434102061494727 \cdot 2^{76}}$
$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{4346230640147910391362136347209 \cdot 2^{82}}$	
$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{5806380862177967379257836137901 \cdot 2^{12}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
105	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{3099045859840376923639621455559 \cdot 2^{26}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{5930531537013235573045541115317 \cdot 2^{24}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{4507202134144815649796597830999 \cdot 2^{104}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{6864815558159026917050992384693 \cdot 2^{94}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{2925727701111547009504281135579 \cdot 2^{91}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{2897851835034729286431120537305 \cdot 2^{73}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{4207310640202495098496353661625 \cdot 2^{74}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{5795151193751316209090246176109 \cdot 2^{96}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{4329519119014951697749534020025 \cdot 2^{89}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{3380951796198016561337032536519 \cdot 2^{85}}$
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{5794974172471909695641752399287 \cdot 2^{53}}$
	$x^{4503599627370499}$	Welch	$x^{2087895106258260389388671192847 \cdot 2^{56}}$
	$x^{4503599694479359}$	Niho	$x^{100743819802418973682347 \cdot 2^{80}}$
	$x^{20282409603651670423947251286015}$	Inverse	$x^{20282409603651670423947251286015 \cdot 2^2}$
	$x^{19342822337210501698682879}$	Dobbertin	$x^{6760804813119084908857558652245 \cdot 2^1}$
	107	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{32451855365842672678315602057627 \cdot 2^{104}}$
$x^9$		Gold ( $i = 3$ )	$x^{18028808536579262599064223365351 \cdot 2^{102}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{28633990028684711186749060639085 \cdot 2^{101}}$
$x^{33}$		Gold ( $i = 5$ )	$x^{24584738913517176271451213680027 \cdot 2^{99}}$
$x^{65}$		Gold ( $i = 6$ )	$x^{2496296566603282513716584773695 \cdot 2^{96}}$
$x^{129}$		Gold ( $i = 7$ )	$x^{16351710068060261427058249098867 \cdot 2^{94}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{15783976345254218228752724736231 \cdot 2^{94}}$
$x^{513}$		Gold ( $i = 9$ )	$x^{316294886606653729808144269823 \cdot 2^{90}}$
$x^{1025}$		Gold ( $i = 10$ )	$x^{9023198809039182159336533255111 \cdot 2^{91}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{23202522260107132978883531974363 \cdot 2^{87}}$
$x^{4097}$		Gold ( $i = 12$ )	$x^{27049813540237424260787840134485 \cdot 2^{85}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{23191213617357359762179647265645 \cdot 2^{92}}$
$x^{16385}$		Gold ( $i = 14$ )	$x^{26173406692682997829962812405165 \cdot 2^{81}}$
$x^{32769}$		Gold ( $i = 15$ )	$x^{16226422843825938900613419397939 \cdot 2^{78}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{2458511404113842102138287750175 \cdot 2^{81}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{15703149592811421990968140353139 \cdot 2^{86}}$
$x^{262145}$		Gold ( $i = 18$ )	$x^{61896765846845586752220031 \cdot 2^{72}}$
$x^{524289}$		Gold ( $i = 19$ )	$x^{24275029414412678092321609665947 \cdot 2^{73}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
107	$x^{1048577}$	Gold ( $i = 20$ )	$x^{1247997111921781400653530128511 \cdot 2^{74}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{2433889539294278260202299054899 \cdot 2^{67}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{9014406417490575982770765197767 \cdot 2^{67}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{628892807800222192255042027775 \cdot 2^{77}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{24334930600062708624742531308339 \cdot 2^{74}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{8943425011733217468407160752015 \cdot 2^{79}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{23179897380702367113214534989531 \cdot 2^{80}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{1208925810607430054182911 \cdot 2^{54}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{15702510738886829690219167718631 \cdot 2^{54}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{16194174551195956642253806397235 \cdot 2^{50}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{26247532915174303018795965721901 \cdot 2^{49}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{15775190276944620812670216321479 \cdot 2^{51}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{79150829022312125816524244991 \cdot 2^{54}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{26990599550403088138026582616789 \cdot 2^{43}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{4763293164502896778508214762527 \cdot 2^{44}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{16225927683393572987448201524019 \cdot 2^{38}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{27043212805262424438846925395285 \cdot 2^{37}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{4772331671482175147424495898383 \cdot 2^{38}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{23269741250703429229841162652013 \cdot 2^{39}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{26990445560371732714357966154581 \cdot 2^{40}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{9902311536028374059884486655 \cdot 2^{41}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{24275632544704129176283833489843 \cdot 2^{52}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{8948121812850824376956429504271 \cdot 2^{50}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{27043199909663225801363439310165 \cdot 2^{44}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{26835186900658361645701595353781 \cdot 2^{46}}$
	$x^{35184372088833}$	Gold ( $i = 45$ )	$x^{26211104426646163266140977649333 \cdot 2^{52}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{27042387486323800055338312062293 \cdot 2^{47}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{23355351896183937153662162003163 \cdot 2^{54}}$
	$x^{281474976710657}$	Gold ( $i = 48$ )	$x^{23859326978795218698913209478445 \cdot 2^{49}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{4762992470524998508512651648783 \cdot 2^{50}}$
	$x^{112589906842625}$	Gold ( $i = 50$ )	$x^{26830274121366061847206102919893 \cdot 2^{51}}$
	$x^{2251799813685249}$	Gold ( $i = 51$ )	$x^{26170851101486063544496601880245 \cdot 2^{52}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{23179896689887643929538012306285 \cdot 2^{53}}$
	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{18014398509481983 \cdot 2^{54}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
107	$x^{13}$	Kasami ( $i = 2$ )	$x^{12481482833016412568582923868475 \cdot 2^{96}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{2846653979459883568273298428407 \cdot 2^{90}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{3366375037950484717667593574443 \cdot 2^{100}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{24347061679307946772754404633803 \cdot 2^{79}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{40232897800449631388944302015 \cdot 2^{72}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{16099170420466331743286913192755 \cdot 2^{73}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{14190012582803251966154300300467 \cdot 2^{73}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{620178940841611617795833343 \cdot 2^{54}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{9246064888140488644425152094931 \cdot 2^{62}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{6629115924649542910873674517237 \cdot 2^{53}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{13204692965124155548004690603 \cdot 2^{84}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{3334230261526021748526326240747 \cdot 2^{82}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{26247678268486410361098827379893 \cdot 2^{62}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{12432726668756823854201379891035 \cdot 2^{57}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{11929662884639263406588661381271 \cdot 2^{76}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{13085405583968187155415466871907 \cdot 2^{74}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{4722384497268154433535 \cdot 2^0}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{6388199495324597956413832903285 \cdot 2^{72}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{14441095598393085311861965661913 \cdot 2^{97}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{6240738440689739920907627679429 \cdot 2^3}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{14055354320512404702401416452563 \cdot 2^{92}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{11317957975000662280872196416695 \cdot 2^1}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{24338891041047795001103980743987 \cdot 2^{98}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{1346183063398804784199030032367 \cdot 2^{86}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{24311107401896036035070382086733 \cdot 2^{88}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{23179897380702367113214534989533 \cdot 2^{25}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{5679842308469382854733884785915 \cdot 2^{21}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{6249889070478466086918218015355 \cdot 2^{14}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{23554105423919820750670852896173 \cdot 2^{104}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{14230490131436045358209371421283 \cdot 2^{103}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{14491682558939170221425561286473 \cdot 2^{25}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{27148439313837255354549919918805 \cdot 2^{100}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{14750843366427363635819655097501 \cdot 2^{33}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{32451855365842672678329345952973 \cdot 2^1}$



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
107	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{787061080478274202283 \cdot 2^{36}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{9544663343450476256312782395031 \cdot 2^{34}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{23898653176395766709813039552877 \cdot 2^{95}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{27069596427117546548309691509589 \cdot 2^{90}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{11585704497216438483324844453303 \cdot 2^{28}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{12287605335968779815991455837341 \cdot 2^{90}}$
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{14054615943964526410871073099419 \cdot 2^{72}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{27043219252476339633231211353429 \cdot 2^{66}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{26191459308340361316380401556149 \cdot 2^{77}}$
	$x^{1237940039285345090527035393}$	Kasami ( $i = 45$ )	$x^{26171490350258971514661585509045 \cdot 2^{97}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{27042387561881663746068263392597 \cdot 2^{47}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{14443534116288493279277355710045 \cdot 2^{43}}$
	$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{23863988597345914601634886659373 \cdot 2^{86}}$
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{326795621140866919015974707183 \cdot 2^{90}}$
	$x^{126765060022828275596796362753}$	Kasami ( $i = 50$ )	$x^{211262305567013103916703279787 \cdot 2^8}$
	$x^{5070602400912915354186999136257}$	Kasami ( $i = 51$ )	$x^{844300872810476380967337819819 \cdot 2^6}$
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{24450028015361044118895821478733 \cdot 2^{102}}$
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{11589948344943812957569751412151 \cdot 2^2}$
	$x^{9007199254740995}$	Welch	$x^{9246392613429438086731826925327 \cdot 2^{59}}$
	$x^{1208925828621828429447167}$	Niho	$x^{402975279209675894729387 \cdot 2^{81}}$
$x^{81129638414606681695789005144063}$	Inverse	$x^{81129638414606681695789005144063 \cdot 2^2}$	
109	$x^3$	Gold ( $i = 1$ )	$x^{216345702438951151188770680384171 \cdot 2^{108}}$
	$x^5$	Gold ( $i = 2$ )	$x^{129807421463370690713262408230503 \cdot 2^{107}}$
	$x^9$	Gold ( $i = 3$ )	$x^{72115234146317050396256893461391 \cdot 2^{106}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{114535960114738844746996242556333 \cdot 2^{102}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{19667791130813741017160970944031 \cdot 2^{100}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{9985186266413130054866339094655 \cdot 2^{103}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{95594612705583066804340533193069 \cdot 2^{96}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{93441139963904971914216130438363 \cdot 2^{95}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{1265179546426614919232577078271 \cdot 2^{100}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{108278385708470185912038399060821 \cdot 2^{91}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{316757983073134921213427058687 \cdot 2^{88}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{108199254160949697043151360535893 \cdot 2^{86}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{62820264384506870337859813088487 \cdot 2^{94}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
109	$x^{16385}$	Gold ( $i = 14$ )	$x^{92730904377708509905324167739099 \cdot 2^{83}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{95447215971189746184993674718509 \cdot 2^{80}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{36058167260336350831361553658311 \cdot 2^{81}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{35776194184647228658965648892871 \cdot 2^{86}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{2475870633873823470088355839 \cdot 2^{91}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{104683723873732003902290616825261 \cdot 2^{73}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{97339751428608190873242306451891 \cdot 2^{73}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{19089335788285755912622348111631 \cdot 2^{68}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{108172877009886911793249180276053 \cdot 2^{67}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{104844456392501275052752943927989 \cdot 2^{70}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{64895791784468547725537499834163 \cdot 2^{75}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{64776700021721190848875031488115 \cdot 2^{78}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{104683409397637737827778055296693 \cdot 2^{79}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{4835703242429719948296191 \cdot 2^{82}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{92719588141179996350649927654253 \cdot 2^{54}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{107321097094686416032391073458901 \cdot 2^{52}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{63096426172641255669524083456231 \cdot 2^{55}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{108169550096410927602812077135189 \cdot 2^{48}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{107340747603214520129300644584117 \cdot 2^{53}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{92764815826299326711539195595629 \cdot 2^{44}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{4991988410203377394306238103679 \cdot 2^{48}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{35792487535925335549361005727503 \cdot 2^{43}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{108172851221049697755353341842773 \cdot 2^{38}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{97355566097764136359097160381235 \cdot 2^{39}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{93422007871383157583345746078875 \cdot 2^{40}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{2515571230024908974511047508223 \cdot 2^{47}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{35773854713322193170148161193871 \cdot 2^{44}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{39609245848983603259805548543 \cdot 2^{55}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{107962398182723030175060583623381 \cdot 2^{52}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{63100828803427715369625111654855 \cdot 2^{49}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{64903679783188052572698292990771 \cdot 2^{45}}$
	$x^{35184372088833}$	Gold ( $i = 45$ )	$x^{6289118771245408916886760769139 \cdot 2^{46}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{97109709329987681783706440584603 \cdot 2^{55}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{97354575715273674831699168047923 \cdot 2^{49}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
109	$x_{281474976710657}$	Gold ( $i = 48$ )	$x_{104990131509563071801155980207533 \cdot 2^{54}}$
	$x_{562949953421313}$	Gold ( $i = 49$ )	$x_{9829091512859617807609375030303 \cdot 2^{50}}$
	$x_{1125899906842625}$	Gold ( $i = 50$ )	$x_{19051969882099434494846805229087 \cdot 2^{55}}$
	$x_{2251799813685249}$	Gold ( $i = 51$ )	$x_{97100039677324605048283193989555 \cdot 2^{53}}$
	$x_{4503599627370497}$	Gold ( $i = 52$ )	$x_{62810042643566537630385333456499 \cdot 2^{53}}$
	$x_{9007199254740993}$	Gold ( $i = 53$ )	$x_{92719586759550513954500016715483 \cdot 2^{55}}$
	$x_{18014398509481985}$	Gold ( $i = 54$ )	$x_{36028797018963967 \cdot 2^{55}}$
	$x_{13}$	Kasami ( $i = 2$ )	$x_{49925931332065650274331695473275 \cdot 2^{103}}$
	$x_{57}$	Kasami ( $i = 3$ )	$x_{11386615917839534273093193704439 \cdot 2^{100}}$
	$x_{241}$	Kasami ( $i = 4$ )	$x_{13465500151801938870670374297771 \cdot 2^{101}}$
	$x_{993}$	Kasami ( $i = 5$ )	$x_{47713704767502821863384470296215 \cdot 2^{96}}$
	$x_{4033}$	Kasami ( $i = 6$ )	$x_{160931591201798525555743129535 \cdot 2^{91}}$
	$x_{16257}$	Kasami ( $i = 7$ )	$x_{95297507237825502470491902528813 \cdot 2^{75}}$
	$x_{65281}$	Kasami ( $i = 8$ )	$x_{97224826097203013471377053820621 \cdot 2^{84}}$
	$x_{261633}$	Kasami ( $i = 9$ )	$x_{2480715763366446333475945983 \cdot 2^{82}}$
	$x_{1047553}$	Kasami ( $i = 10$ )	$x_{107961473058708276466568966875989 \cdot 2^{61}}$
	$x_{4192257}$	Kasami ( $i = 11$ )	$x_{46382407875370731497208335115703 \cdot 2^{78}}$
	$x_{16773121}$	Kasami ( $i = 12$ )	$x_{52818771860496622192018762411 \cdot 2^{85}}$
	$x_{67100673}$	Kasami ( $i = 13$ )	$x_{12587721135928309754419713115259 \cdot 2^{45}}$
	$x_{268419073}$	Kasami ( $i = 14$ )	$x_{26516463665523446768389015857909 \cdot 2^{51}}$
	$x_{1073709057}$	Kasami ( $i = 15$ )	$x_{94258172465544862210766492346733 \cdot 2^{47}}$
	$x_{4294901761}$	Kasami ( $i = 16$ )	$x_{37006545174774046381323662809555 \cdot 2^{18}}$
	$x_{17179738113}$	Kasami ( $i = 17$ )	$x_{56215812447146627952567708338579 \cdot 2^{55}}$
	$x_{68719214593}$	Kasami ( $i = 18$ )	$x_{9444768994536309129215 \cdot 2^{55}}$
	$x_{274877382657}$	Kasami ( $i = 19$ )	$x_{94215063966568372418353399501989 \cdot 2^1}$
	$x_{1099510579201}$	Kasami ( $i = 20$ )	$x_{49145457565476374815755072759965 \cdot 2^{108}}$
	$x_{4398044413953}$	Kasami ( $i = 21$ )	$x_{56544580710871776540373097524891 \cdot 2^{100}}$
	$x_{17592181850113}$	Kasami ( $i = 22$ )	$x_{108172799638652903205453755143509 \cdot 2^1}$
$x_{70368735789057}$	Kasami ( $i = 23$ )	$x_{104767703505607354286107299305141 \cdot 2^{82}}$	
$x_{281474959933441}$	Kasami ( $i = 24$ )	$x_{64911633548409239022992186618675 \cdot 2^{75}}$	
$x_{1125899873288193}$	Kasami ( $i = 25$ )	$x_{24999556132271731311717257233019 \cdot 2^{80}}$	
$x_{4503599560261633}$	Kasami ( $i = 26$ )	$x_{3377203637639733995486903107243 \cdot 2^{32}}$	
$x_{18014398375264257}$	Kasami ( $i = 27$ )	$x_{46359794070589998175324896718263 \cdot 2^{29}}$	
$x_{72057593769492481}$	Kasami ( $i = 28$ )	$x_{95577382308107916774829718805069 \cdot 2^{86}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$	
109	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{845049222304657664710704884395 \cdot 2^{30}}$	
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{56921921861441052285659217611875 \cdot 2^{21}}$	
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{108174501781009052511676578583893 \cdot 2^{96}}$	
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{104806070132342045184962727598805 \cdot 2^{27}}$	
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{13297345651062974392742133126635 \cdot 2^{34}}$	
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{45281658659384549625670058488893 \cdot 2^{36}}$	
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{38178653376024195134836844974803 \cdot 2^{37}}$	
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{3148244321913096809131 \cdot 2^{37}}$	
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{129807421463370690713482310556059 \cdot 2^{106}}$	
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{59003373429075338797380766611037 \cdot 2^{29}}$	
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{58085032969351489145850948036329 \cdot 2^{27}}$	
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{2850822451826120237909752694775 \cdot 2^{19}}$	
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{57951864080336695740557559708233 \cdot 2^{17}}$	
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{107328582572831007794286954916693 \cdot 2^{18}}$	
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{56755163885155210188267816131027 \cdot 2^{75}}$	
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{49730908186048375539422201262395 \cdot 2^{75}}$	
	$x^{1237940039285345090527035393}$	Kasami ( $i = 45$ )	$x^{52259918450489010108357271194723 \cdot 2^{84}}$	
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{25572604869584159712380425419381 \cdot 2^{83}}$	
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{24963727457851162545082964856517 \cdot 2^{80}}$	
	$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{104991296914348294291125056091437 \cdot 2^{41}}$	
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{57774136739842762141984772809949 \cdot 2^{42}}$	
	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{1307182484268914208656391946223 \cdot 2^{105}}$	
	$x^{5070602400912915354186999136257}$	Kasami ( $i = 51$ )	$x^{97357531328286701435404073880787 \cdot 2^{46}}$	
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{66930032826432722442733630377267 \cdot 2^{100}}$	
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{97800112061443686878779959719517 \cdot 2^{108}}$	
	$x^{324518553658426708768757511094273}$	Kasami ( $i = 54$ )	$x^{92719586759550513954500016715485 \cdot 2^{108}}$	
	$x^{18014398509481987}$	Welch	$x^{28633990028684712776254811475727 \cdot 2^{57}}$	
	$x^{18014398643699711}$	Niho	$x^{1611901092819505655753387 \cdot 2^{55}}$	
	$x^{324518553658426726783156020576255}$	Inverse	$x^{324518553658426726783156020576255 \cdot 2^2}$	
	111	$x^3$	Gold ( $i = 1$ )	$x^{865382809755804604755082721536683 \cdot 2^{110}}$
		$x^5$	Gold ( $i = 2$ )	$x^{519229685853482762853049632922011 \cdot 2^{108}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{152714613486318459662661656741775 \cdot 2^{104}}$	
$x^{33}$		Gold ( $i = 5$ )	$x^{78671164523254964068643883776063 \cdot 2^{106}}$	
$x^{129}$		Gold ( $i = 7$ )	$x^{20125181622228014064071691198591 \cdot 2^{98}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
111	$x^{257}$	Gold ( $i = 8$ )	$x^{10101744860962699666401743831295 \cdot 2^{96}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{433113542833880743648153596242773 \cdot 2^{92}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{1267031932292539684853708230655 \cdot 2^{100}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{429364228201799794743001496771253 \cdot 2^{93}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{158446654212231541914265993215 \cdot 2^{84}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{432698007124036209976338643866965 \cdot 2^{81}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{431849612073557661703212757265109 \cdot 2^{87}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{370881176610037645792020855708525 \cdot 2^{74}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{259108030757991695320707031263027 \cdot 2^{72}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{432691508039547647172996719007061 \cdot 2^{68}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{381786542818295352917281181871405 \cdot 2^{70}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{252385714328898577092855894784455 \cdot 2^{78}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{388400161146187934493691607436699 \cdot 2^{82}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{9671406520888236647120895 \cdot 2^{56}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{418733618871699846030218860344749 \cdot 2^{55}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{373685630641211203081012212100251 \cdot 2^{51}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{259612862283125276953344960000819 \cdot 2^{50}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{388410120753044423346434226297267 \cdot 2^{45}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{419377823189932676640739693384373 \cdot 2^{42}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{252403319512240853233649323897287 \cdot 2^{41}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{419960535691984561669894479062445 \cdot 2^{46}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{251250391067739850537462132166259 \cdot 2^{42}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{381749538877894677313852554307949 \cdot 2^{55}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{389422248915868959771042881680179 \cdot 2^{48}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{371239118823491936234463907488987 \cdot 2^{48}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{76356724178696704929818629512975 \cdot 2^{52}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{144212859884834043056272658981831 \cdot 2^{53}}$
	$x^{1125899906842625}$	Gold ( $i = 50$ )	$x^{39316366051436200307376154343487 \cdot 2^{56}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{143094795313952233018463658042311 \cdot 2^{53}}$
	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{251240170574265890184427390344423 \cdot 2^{56}}$
	$x^{36028797018963969}$	Gold ( $i = 55$ )	$x^{72057594037927935 \cdot 2^{56}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{199703725328262601097326781893083 \cdot 2^{106}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{269310003036038777413407485955671 \cdot 2^{95}}$
$x^{993}$	Kasami ( $i = 5$ )	$x^{269288306359057022023484955652793 \cdot 2^{88}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
111	$x^{16257}$	Kasami ( $i = 7$ )	$x^{277069417775663589084714619409849 \cdot 2^{80}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{277069378635530583845008256052681 \cdot 2^{82}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{431845892234833105866825085397845 \cdot 2^{52}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{278022896370149706787586361224777 \cdot 2^{58}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{429363009604573625431003168066229 \cdot 2^{41}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{278141782124461898101330894615113 \cdot 2^{58}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{432678200083407643962310075798869 \cdot 2^{49}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{429304388010121381106849582262869 \cdot 2^{61}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{370878347081377977947093965658989 \cdot 2^{109}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{198140486783297155863971063682603 \cdot 2^{109}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{432691353297079629988609775719765 \cdot 2^{91}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{371647813821010976764093176294829 \cdot 2^{93}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{21638091495667363686202118287815 \cdot 2^{77}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{186932748888727638177988015705817 \cdot 2^{91}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{27815876096946623802557866008521 \cdot 2^{86}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{420001308081994065977072671954357 \cdot 2^{21}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{185462517442220368497412918720217 \cdot 2^{107}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{198143587585760992081339511633467 \cdot 2^{103}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{187246572871139008046455700344283 \cdot 2^{110}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{439348195722177722414389569180853 \cdot 2^{108}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{288460936585268201585149741804203 \cdot 2^{109}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{379553863946837120130235176887733 \cdot 2^{28}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{198338897562231066879800774987463 \cdot 2^{19}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{370974552316007607338318305127853 \cdot 2^{19}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{187222248446880460668016017649979 \cdot 2^{73}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{185439528597881939865581688567497 \cdot 2^{77}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{269267918532465470975917330050647 \cdot 2^{106}}$
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{270434328831243323552125723374023 \cdot 2^{92}}$
	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{269604904772404312596936951304633 \cdot 2^{91}}$
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{270572969585738190045068612949447 \cdot 2^{101}}$
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{218597171433114655300708156549831 \cdot 2^{103}}$
	$x^{1298074214633706871103827063341057}$	Kasami ( $i = 55$ )	$x^{370878347038202004348290039770551 \cdot 2^{56}}$
	$x^{36028797018963971}$	Welch	$x^{152714613486319273489606085104335 \cdot 2^{50}}$
$x^{9671406592945830416613375}$	Niho	$x^{6447604371278022354578091 \cdot 2^{56}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
111	$x^{1298074214633706907132624082305023}$	Inverse	$x^{1298074214633706907132624082305023 \cdot 2^2}$
113	$x^3$	Gold ( $i = 1$ )	$x^{3461531239023218419020330886146731 \cdot 2^{112}}$
	$x^5$	Gold ( $i = 2$ )	$x^{2076918743413931051412198531688039 \cdot 2^{111}}$
	$x^9$	Gold ( $i = 3$ )	$x^{1153843746341072806340110295382247 \cdot 2^{108}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{610858453945273838650646626967071 \cdot 2^{109}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{1573423290465099281372877675521243 \cdot 2^{107}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{1757392782888710889656475680659125 \cdot 2^{103}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{80500726488912056256286764794111 \cdot 2^{106}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{40406979443850798665606975324671 \cdot 2^{105}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{1680158437654544612740862359942573 \cdot 2^{101}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{577484723778507658197538128323527 \cdot 2^{94}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{1484961424646856510648546046326491 \cdot 2^{101}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{1553760299869099016982765071912347 \cdot 2^{93}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{305466506263125462828231323164431 \cdot 2^{92}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{633786616848926167657063940095 \cdot 2^{99}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{1717297242906419537917346248485589 \cdot 2^{84}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{1730792028496144839905354575435093 \cdot 2^{82}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{157266702741092869509861454510143 \cdot 2^{91}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{1004965793771920441802743988067559 \cdot 2^{93}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{19807002849706278897823776767 \cdot 2^{76}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{1717140039140240836920926488320693 \cdot 2^{75}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{1494742560046102122998030332028123 \cdot 2^{78}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{576922010719396862897328957977031 \cdot 2^{70}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{1038459495500954696850627007558451 \cdot 2^{70}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{1489263442443981501009538439661933 \cdot 2^{73}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{1730554395998701092728309998595413 \cdot 2^{77}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{1727378641405011800916571414964949 \cdot 2^{80}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{1004960722230612768812622088359539 \cdot 2^{82}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{38685626083552946051612671 \cdot 2^{85}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{1483513393679325916095933326407387 \cdot 2^{57}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{1553600637274082357616327460182451 \cdot 2^{55}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{1557435403888301994759250015787443 \cdot 2^{55}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{1557673212048841706973760566440755 \cdot 2^{51}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{304850743772090542166783412420127 \cdot 2^{57}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
113	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{2534063864732581299870259742719 \cdot 2^{46}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{1009543127042478172877883691178215 \cdot 2^{49}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{157342329048799560371407424617503 \cdot 2^{42}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{1557689057564226181745451486884659 \cdot 2^{41}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{1730765619517905698154037449676117 \cdot 2^{39}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{1527146134863740169154029165554989 \cdot 2^{40}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{1006259081111437310695704090166899 \cdot 2^{41}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{1729921343599653478765644647410517 \cdot 2^{43}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{1483603923572565929327659565865837 \cdot 2^{43}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{1675016214471857504405468373243573 \cdot 2^{55}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{79881487750655659473414421737535 \cdot 2^{51}}$
	$x^{35184372088833}$	Gold ( $i = 45$ )	$x^{1730765413188318519936846914737493 \cdot 2^{47}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{1679860675529502915590776148536621 \cdot 2^{48}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{10121417066305166157985991098879 \cdot 2^{48}}$
	$x^{281474976710657}$	Gold ( $i = 48$ )	$x^{1009612177648897868320162014181831 \cdot 2^{54}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{572678635418100675327038688038671 \cdot 2^{53}}$
	$x^{1125899906842625}$	Gold ( $i = 50$ )	$x^{10383325911170804187555355722934067 \cdot 2^{53}}$
	$x^{2251799813685249}$	Gold ( $i = 51$ )	$x^{1526996926642875685160363443841389 \cdot 2^{56}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{1036427161586208543413039560189555 \cdot 2^{55}}$
	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{572379181255807842699204609951631 \cdot 2^{57}}$
	$x^{18014398509481985}$	Gold ( $i = 54$ )	$x^{1674934470495105835386805861922221 \cdot 2^{56}}$
	$x^{36028797018963969}$	Gold ( $i = 55$ )	$x^{1483513388152808058568928180755309 \cdot 2^{56}}$
	$x^{72057594037927937}$	Gold ( $i = 56$ )	$x^{144115188075855871 \cdot 2^{57}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{798814901313050404389307127572323 \cdot 2^{110}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{910929273427162741847455496354403 \cdot 2^{109}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{904881610201090292109049152818843 \cdot 2^{92}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{449685327123862211534363226901237 \cdot 2^{106}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{1676263453957933442188620436560565 \cdot 2^{91}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{924309965467170520819785749309145 \cdot 2^{74}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{744631411736999375902674693006519 \cdot 2^{98}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{1507441663630308244785326928082341 \cdot 2^{87}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{899453623569290556600942486415763 \cdot 2^{57}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{924377780749748959085667023631949 \cdot 2^{48}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{786711654613172903874673834617949 \cdot 2^{42}}$



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
113	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{601313790744622863580837040264847 \cdot 2^{45}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{741801961785102373043112505847223 \cdot 2^{86}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{13522015825213256149847519537835 \cdot 2^{91}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{1730712800333630575849236008195413 \cdot 2^{66}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{764766723517933513721929919674519 \cdot 2^{81}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{921213639303910897354557046754403 \cdot 2^{79}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{75558007841102398750719 \cdot 2^0}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{1676253316539625167370223751088789 \cdot 2^1}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{1555597178718490128810676376413389 \cdot 2^{112}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{91092908339251406094408280183287 \cdot 2^{95}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{399407593495783208039606470816059 \cdot 2^{93}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{212752582883667920323526194582571 \cdot 2^4}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{422550212672128212255188014421 \cdot 2^{76}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{172739837107438791391650243377109 \cdot 2^{106}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{1070880526394070734793101125733171 \cdot 2^{82}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{1483513393679325988153527364335323 \cdot 2^{85}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{426764193191356837338751811578645 \cdot 2^{21}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{1557681196642135921444587253320915 \cdot 2^{94}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{398626216010622677144886485934789 \cdot 2^{94}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{786333513705464347549857024170299 \cdot 2^{106}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{10774391828064339116715730812911 \cdot 2^{29}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{927467529105122971742075173582665 \cdot 2^{26}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{202034898423475821426653821077755 \cdot 2^{33}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{944053974865205420758092265776349 \cdot 2^{34}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{2076918743413931051412418434013595 \cdot 2^{112}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{12592977287652387236523 \cdot 2^{38}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{1832575361835821515952974715374413 \cdot 2^{108}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{40250363244456028128579777097851 \cdot 2^{104}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{1732454171335522975717415852878677 \cdot 2^{94}}$
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{1524797540166795487780531583998797 \cdot 2^{21}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{54032782359918235019567772795563 \cdot 2^{33}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{1287455185235519805580879855551 \cdot 2^{76}}$
	$x^{1237940039285345090527035393}$	Kasami ( $i = 45$ )	$x^{1730766032158264375650689526093141 \cdot 2^{70}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{107723991583144170432157673238613 \cdot 2^{26}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
113	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{19845726180934718918246792703 \cdot 2^{76}}$
	$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{908082467421304382862586966612435 \cdot 2^{105}}$
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{43079085700453882097656976672759 \cdot 2^{46}}$
	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{1038586136774543212681650433635123 \cdot 2^{90}}$
	$x^{5070602400912915354186999136257}$	Kasami ( $i = 51$ )	$x^{1509398448415958328136552822819181 \cdot 2^{93}}$
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{795676294772371620168692582378595 \cdot 2^1}$
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{591770283277576560591893076038355 \cdot 2^{51}}$
	$x^{324518553658426708768757511094273}$	Kasami ( $i = 54$ )	$x^{1680005227643250632826740968699061 \cdot 2^{51}}$
	$x^{1298074214633706871103827063341057}$	Kasami ( $i = 55$ )	$x^{1564801792983098879506362475403629 \cdot 2^{56}}$
	$x^{5192296858534827556472902291292161}$	Kasami ( $i = 56$ )	$x^{741756694076403957226870052449719 \cdot 2^2}$
	$x^{72057594037927939}$	Welch	$x^{601313790602378935319106711129871 \cdot 2^{63}}$
	$x^{72057594306363391}$	Niho	$x^{6447604395297220277742251 \cdot 2^{86}}$
	$x^{5192296858534827628530496329220095}$	Inverse	$x^{5192296858534827628530496329220095 \cdot 2^2}$
	115	$x^3$	Gold ( $i = 1$ )
$x^5$		Gold ( $i = 2$ )	$x^{8307674973655724205648794126752155 \cdot 2^{112}}$
$x^9$		Gold ( $i = 3$ )	$x^{4615374985364291225360441181528975 \cdot 2^{112}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{7330301447343286063807759523604845 \cdot 2^{109}}$
$x^{65}$		Gold ( $i = 6$ )	$x^{7029571131554843558625902722636469 \cdot 2^{104}}$
$x^{129}$		Gold ( $i = 7$ )	$x^{6118055213157316275477794124352365 \cdot 2^{106}}$
$x^{257}$		Gold ( $i = 8$ )	$x^{5980232957689918202509832348051163 \cdot 2^{106}}$
$x^{513}$		Gold ( $i = 9$ )	$x^{6234804804790358321978139841714611 \cdot 2^{101}}$
$x^{2049}$		Gold ( $i = 11$ )	$x^{6710201113421290170985238789543605 \cdot 2^{100}}$
$x^{4097}$		Gold ( $i = 12$ )	$x^{4025075621846866621482269060681331 \cdot 2^{92}}$
$x^{8193}$		Gold ( $i = 13$ )	$x^{6231009729417115250056370060892979 \cdot 2^{93}}$
$x^{16385}$		Gold ( $i = 14$ )	$x^{5934777880173344633940746735040219 \cdot 2^{100}}$
$x^{65537}$		Gold ( $i = 16$ )	$x^{2307722704661526453207139433902535 \cdot 2^{84}}$
$x^{131073}$		Gold ( $i = 17$ )	$x^{6719447653842603752579531324894509 \cdot 2^{87}}$
$x^{262145}$		Gold ( $i = 18$ )	$x^{2289526706485944020435625824208783 \cdot 2^{94}}$
$x^{524289}$		Gold ( $i = 19$ )	$x^{79228011398825115591294058495 \cdot 2^{96}}$
$x^{2097153}$		Gold ( $i = 21$ )	$x^{6919685379229592523445915658922837 \cdot 2^{75}}$
$x^{4194305}$	Gold ( $i = 22$ )	$x^{6215022016093804951385676883324059 \cdot 2^{75}}$	
$x^{16777217}$	Gold ( $i = 24$ )	$x^{1219403052455035211053390005566495 \cdot 2^{77}}$	
$x^{67108865}$	Gold ( $i = 26$ )	$x^{6107988016207696921779829461314861 \cdot 2^{79}}$	
$x^{134217729}$	Gold ( $i = 27$ )	$x^{6868550253050167575505431790705333 \cdot 2^{83}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
115	$x^{268435457}$	Gold ( $i = 28$ )	$x^{5934053641035519766441586779937645 \cdot 2^{85}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{77371252311221079642210303 \cdot 2^{58}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{1219326082144695636515338942553871 \cdot 2^{54}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{319486955965771501976337993166911 \cdot 2^{52}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{6923009660077384023712886535411029 \cdot 2^{51}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{4020494445030555840878636089679079 \cdot 2^{58}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{161001452980166992007950984265855 \cdot 2^{44}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{1221716907899436837739640157835023 \cdot 2^{42}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{6923062478071622792616012359750997 \cdot 2^{40}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{4153837486835417889197043471299379 \cdot 2^{40}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{80813958887738347264937058828543 \cdot 2^{42}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{4145728482461192153558993198278451 \cdot 2^{43}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{1267573233697996441706915971071 \cdot 2^{44}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{2289676273076098306123650068243399 \cdot 2^{55}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{629369016079367994094022562970655 \cdot 2^{48}}$
	$x^{281474976710657}$	Gold ( $i = 48$ )	$x^{40485668265073234513341728687103 \cdot 2^{58}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{4153805795321078611920358719517491 \cdot 2^{52}}$
	$x^{2251799813685249}$	Gold ( $i = 51$ )	$x^{6922217274472024842203013413776725 \cdot 2^{53}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{4038171274444282305700271292365031 \cdot 2^{58}}$
	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{6909514410574722852635123018738389 \cdot 2^{55}}$
	$x^{18014398509481985}$	Gold ( $i = 54$ )	$x^{6214402539348770220341570990165403 \cdot 2^{58}}$
	$x^{72057594037927937}$	Gold ( $i = 56$ )	$x^{5934053552611231740166496462943963 \cdot 2^{58}}$
	$x^{144115188075855873}$	Gold ( $i = 57$ )	$x^{288230376151711743 \cdot 2^{58}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{3195259605252201617557228510289291 \cdot 2^{111}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{3643717093708650967389821985417683 \cdot 2^{103}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{6032544068007268614060327685402029 \cdot 2^{97}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{6705053815831733768754481746238133 \cdot 2^{98}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{871291494745833165444497384887339 \cdot 2^{95}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{3697545937708783057782903354766925 \cdot 2^{76}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{1594485018335310113734330902733509 \cdot 2^{91}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{216448037178433115231721132196523 \cdot 2^{83}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{1448973769807404550010634632086139 \cdot 2^{56}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{6230756261194072029782605652871987 \cdot 2^{41}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{6223641052838677053676537594615501 \cdot 2^{66}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
115	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{364371014461216974345989881602551 \cdot 2^{55}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{430895347282276234761786295496789 \cdot 2^{69}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{3597811996541230509929833525857691 \cdot 2^{57}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{151116015682204798025727 \cdot 2^{58}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{6909534266076473801312005399423317 \cdot 2^1}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{623023339722678668154029716434123 \cdot 2^{102}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{41829916636476018850413903626223 \cdot 2^{111}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{6109181080920558749703518586481965 \cdot 2^{79}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{6869817826279070148062318032149173 \cdot 2^{90}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{6259207180411436598711794055666477 \cdot 2^{85}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{2967026781832133799667847338356151 \cdot 2^{30}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{3618854398760357006291632115051677 \cdot 2^{96}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{5149820740923632513708991184831 \cdot 2^{109}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{6923168113984579359902888983450965 \cdot 2^{100}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{3635178483566089556171088726695219 \cdot 2^{27}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{2898026153900722600634603637941431 \cdot 2^{37}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{2443433815923321921616072293127831 \cdot 2^{38}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{50371909150609548946091 \cdot 2^{39}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{8307674973655724205649014029077709 \cdot 2^{114}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{3717442109436384391285151202096873 \cdot 2^{28}}$
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{3182784213918859688354713025440611 \cdot 2^{105}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{3708919291470732230262410999347785 \cdot 2^{18}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{2367002524480045626944761143911123 \cdot 2^{100}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{3053676785973508560363291183200407 \cdot 2^{90}}$
	$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{79305533619001606358387654143 \cdot 2^{106}}$
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{1597593236153849145068729634631995 \cdot 2^{101}}$
	$x^{5070602400912915354186999136257}$	Kasami ( $i = 51$ )	$x^{1690200850670066104672231707989 \cdot 2^{90}}$
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{727325649256900375483789908314363 \cdot 2^{42}}$
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{6909593638737827408279475607415637 \cdot 2^{108}}$
	$x^{324518553658426708768757511094273}$	Kasami ( $i = 54$ )	$x^{3146884694496396272478554351103133 \cdot 2^{48}}$
	$x^{5192296858534827556472902291292161}$	Kasami ( $i = 56$ )	$x^{1707056501436109735050472624352021 \cdot 2^{110}}$
	$x^{20769187434139310370006797241024513}$	Kasami ( $i = 57$ )	$x^{5934053552611231740166496462943965 \cdot 2^{114}}$
	$x^{144115188075855875}$	Welch	$x^{2443433815781095558059322614958923 \cdot 2^{56}}$
$x^{77371252599451455257051135}$	Niho	$x^{2579041758118881110969003 \cdot 2^{87}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
115	$x^{20769187434139310514121985316880383}$ $x^{4951760747437401827054714879}$	Inverse Dobbertin	$x^{20769187434139310514121985316880383 \cdot 2^2}$ $x^{6923062890693165791157480693519701 \cdot 2^1}$
117	$x^3$ $x^5$ $x^{17}$ $x^{33}$ $x^{129}$ $x^{257}$ $x^{1025}$ $x^{2049}$ $x^{16385}$ $x^{65537}$ $x^{131073}$ $x^{524289}$ $x^{1048577}$ $x^{4194305}$ $x^{8388609}$ $x^{33554433}$ $x^{268435457}$ $x^{536870913}$ $x^{2147483649}$ $x^{4294967297}$ $x^{17179869185}$ $x^{34359738369}$ $x^{137438953473}$ $x^{274877906945}$ $x^{1099511627777}$ $x^{2199023255553}$ $x^{8796093022209}$ $x^{17592186044417}$ $x^{70368744177665}$ $x^{140737488355329}$ $x^{562949953421313}$ $x^{1125899906842625}$	Gold ( $i = 1$ ) Gold ( $i = 2$ ) Gold ( $i = 4$ ) Gold ( $i = 5$ ) Gold ( $i = 7$ ) Gold ( $i = 8$ ) Gold ( $i = 10$ ) Gold ( $i = 11$ ) Gold ( $i = 14$ ) Gold ( $i = 16$ ) Gold ( $i = 17$ ) Gold ( $i = 19$ ) Gold ( $i = 20$ ) Gold ( $i = 22$ ) Gold ( $i = 23$ ) Gold ( $i = 25$ ) Gold ( $i = 28$ ) Gold ( $i = 29$ ) Gold ( $i = 31$ ) Gold ( $i = 32$ ) Gold ( $i = 34$ ) Gold ( $i = 35$ ) Gold ( $i = 37$ ) Gold ( $i = 38$ ) Gold ( $i = 40$ ) Gold ( $i = 41$ ) Gold ( $i = 43$ ) Gold ( $i = 44$ ) Gold ( $i = 46$ ) Gold ( $i = 47$ ) Gold ( $i = 49$ ) Gold ( $i = 50$ )	$x^{55384499824371494704325294178347691 \cdot 2^{116}}$ $x^{33230699894622896822595176507008615 \cdot 2^{115}}$ $x^{29321205789373144255231038094419373 \cdot 2^{110}}$ $x^{25174772647441588501966042808339867 \cdot 2^{109}}$ $x^{16744151109693707701307647077174899 \cdot 2^{106}}$ $x^{16162791777540319466242790129868007 \cdot 2^{107}}$ $x^{23828843339071052843519468031855469 \cdot 2^{98}}$ $x^{9163174934339647000862017924089743 \cdot 2^{103}}$ $x^{26801568453307389777881919898695085 \cdot 2^{100}}$ $x^{2517515677812574312589606655163423 \cdot 2^{86}}$ $x^{24923088303013617389891273004528435 \cdot 2^{87}}$ $x^{23736395303042409330689334748568429 \cdot 2^{96}}$ $x^{23736259483637472857664671527581403 \cdot 2^{79}}$ $x^{644005965454210451606320697032831 \cdot 2^{74}}$ $x^{16615351928015275149610032108352307 \cdot 2^{72}}$ $x^{323255845184580727004958736449791 \cdot 2^{76}}$ $x^{16079370996620113602784393384140007 \cdot 2^{87}}$ $x^{309485009244884317495099391 \cdot 2^{88}}$ $x^{9158066939083161760838656736748487 \cdot 2^{56}}$ $x^{27678721709887190867845225463327573 \cdot 2^{55}}$ $x^{24434328837135111426783153318620461 \cdot 2^{54}}$ $x^{40545017001198037921344570527743 \cdot 2^{59}}$ $x^{27479232605173583625682991213925045 \cdot 2^{45}}$ $x^{16153812448783414606953316211257799 \cdot 2^{44}}$ $x^{9230749970736977768912711705194951 \cdot 2^{41}}$ $x^{2516266939136126936774329017561151 \cdot 2^{47}}$ $x^{24857630115524068900802727915179419 \cdot 2^{47}}$ $x^{5070292925347541013872875962367 \cdot 2^{59}}$ $x^{4886867485922255533963723132571407 \cdot 2^{51}}$ $x^{27692246611012506023108823177581909 \cdot 2^{48}}$ $x^{2375930360470289391030035527887323 \cdot 2^{59}}$ $x^{27692038635473832816955975101240661 \cdot 2^{52}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
117	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{24918966457374767456700946445081011 \cdot 2^{57}}$
	$x^{36028797018963969}$	Gold ( $i = 55$ )	$x^{27474200700278774125562567896947381 \cdot 2^{57}}$
	$x^{72057594037927937}$	Gold ( $i = 56$ )	$x^{26798951527921692176076372906268341 \cdot 2^{57}}$
	$x^{288230376151711745}$	Gold ( $i = 58$ )	$x^{576460752303423487 \cdot 2^{59}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{12781038421008806470228914041157179 \cdot 2^{109}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{24130176272029074456241310741638573 \cdot 2^{94}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{11880058874714127262861316878202585 \cdot 2^{91}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{12683551260757524437731627688103591 \cdot 2^{77}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{13828096423728665188734822840447431 \cdot 2^{82}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{23736304845340575285442865666943853 \cdot 2^{58}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{17235506023693613022690825646347591 \cdot 2^{55}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{24286386573224153784625300784977077 \cdot 2^{48}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{17234431191254153708184590676087225 \cdot 2^{50}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{11982199141660106744689948626882875 \cdot 2^{55}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{23736214210790334337698737044249453 \cdot 2^{58}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{11868107105308815077536572593967689 \cdot 2^1}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{17732437747197885442085323741629881 \cdot 2^{113}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{12681186549417223318040544240906555 \cdot 2^{103}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{17732757140478903594287007659224521 \cdot 2^{86}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{13990218976403926066167390044137927 \cdot 2^{86}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{17802160663360212789796118267728457 \cdot 2^{91}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{17316670667621523921842967801058759 \cdot 2^{14}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{27678741516918370093783662634642773 \cdot 2^{12}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{23785469987743905672531759803755949 \cdot 2^{103}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{17803609047765989388731374476422729 \cdot 2^{109}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{28118284526219374234507941274802869 \cdot 2^{112}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{18461499941457164901441886894074539 \cdot 2^1}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{18461499941457164901443719413454167 \cdot 2^{113}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{17893453789412329058329140426134201 \cdot 2^{109}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{11882591009379932749247746639285979 \cdot 2^{23}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{17802341745250235127750311095792201 \cdot 2^{91}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{17233147095560291496038459164634711 \cdot 2^{83}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{27692251562772663164594738401989973 \cdot 2^{72}}$
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{11868129752893339342069907114014409 \cdot 2^{110}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
117	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{27692038640309536094851541846676821 \cdot 2^{102}}$
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{11982516101969920591200363993663963 \cdot 2^{103}}$
	$x^{1298074214633706871103827063341057}$	Kasami ( $i = 55$ )	$x^{27479271305097686238335995636173525 \cdot 2^{50}}$
	$x^{5192296858534827556472902291292161}$	Kasami ( $i = 56$ )	$x^{26880083642291972149716876888036533 \cdot 2^{108}}$
	$x^{83076749736557241768257565115809793}$	Kasami ( $i = 58$ )	$x^{23736214210444926548908305635044791 \cdot 2^{59}}$
	$x^{288230376151711747}$	Welch	$x^{9773735263124394439641456885274255 \cdot 2^{52}}$
	$x^{288230376688582655}$	Niho	$x^{103161669940448356599507627 \cdot 2^{59}}$
	$x^{83076749736557242056487941267521535}$	Inverse	$x^{83076749736557242056487941267521535 \cdot 2^2}$
119	$x^3$	Gold ( $i = 1$ )	$x^{221537999297485978817301176713390763 \cdot 2^{118}}$
	$x^5$	Gold ( $i = 2$ )	$x^{132922799578491587290380706028034459 \cdot 2^{116}}$
	$x^9$	Gold ( $i = 3$ )	$x^{73845999765828659605767058904463591 \cdot 2^{114}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{39094941052497525673641384125892495 \cdot 2^{112}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{20139818117953270801572834246671903 \cdot 2^{110}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{10224830736807045176183131232925759 \cdot 2^{108}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{11120000742947739727750396093491925 \cdot 2^{105}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{99756876876645733151650237467433395 \cdot 2^{103}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{648403900382885791660393687942143 \cdot 2^{100}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{66493835806712482661122607944722227 \cdot 2^{100}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{16221967241700218121842897977535 \cdot 2^{96}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{99696155670673844000901920974281523 \cdot 2^{95}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{20281790652520917222127728361471 \cdot 2^{90}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{66332608453462431333931992472151667 \cdot 2^{90}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{97727882571708695860731752947083629 \cdot 2^{95}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{107196133246701571995945591494849965 \cdot 2^{97}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{633824695651781353636312907775 \cdot 2^{80}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{107509897141974305182311935550793133 \cdot 2^{81}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{97737354961483610346823982496165165 \cdot 2^{74}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{110769006251089472066828604932445525 \cdot 2^{73}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{109916930496856658868085167030489781 \cdot 2^{77}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{36651432705445175710542723790899087 \cdot 2^{86}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{10064992186257234569611643350744095 \cdot 2^{82}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{94944857195476858630139724300138203 \cdot 2^{89}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{618970019066229386219880447 \cdot 2^{60}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{107195806271420962486941799207851701 \cdot 2^{58}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
119	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{19509217164114968933019281444847135 \cdot 2^{60}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{5111791218676182413995236637270143 \cdot 2^{60}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{94956441133733274157117612359231195 \cdot 2^{49}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{95663523833316912840559389405029595 \cdot 2^{52}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{95664136060296353365343913680989339 \cdot 2^{45}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{66461399789366686227151870907069235 \cdot 2^{42}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{110768999648843733226951990706525525 \cdot 2^{41}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{107511087894372640182733010115570989 \cdot 2^{43}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{36918497078050564369850478699275207 \cdot 2^{47}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{64317810762722151969567862386007271 \cdot 2^{47}}$
	$x^{35184372088833}$	Gold ( $i = 45$ )	$x^{94950651108568662766025067157707629 \cdot 2^{59}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{64610760130416372183498617443006695 \cdot 2^{60}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{36922998782523446125135707716219335 \cdot 2^{51}}$
	$x^{281474976710657}$	Gold ( $i = 48$ )	$x^{99692095722460682813744795335471923 \cdot 2^{50}}$
	$x^{112589906842625}$	Gold ( $i = 50$ )	$x^{6440057627745856285759278136479347 \cdot 2^{58}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{2575944631255365940764518496845951 \cdot 2^{53}}$
	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{110755476391552360577255917751022933 \cdot 2^{54}}$
	$x^{18014398509481985}$	Gold ( $i = 54$ )	$x^{110714886800844247786792884834577237 \cdot 2^{56}}$
	$x^{36028797018963969}$	Gold ( $i = 55$ )	$x^{110552230569195556400740279709510485 \cdot 2^{56}}$
	$x^{144115188075855873}$	Gold ( $i = 57$ )	$x^{64317483667012060746538286621249139 \cdot 2^{58}}$
	$x^{288230376151711745}$	Gold ( $i = 58$ )	$x^{94944856841779706525039366713564013 \cdot 2^{59}}$
	$x^{576460752303423489}$	Gold ( $i = 59$ )	$x^{1152921504606846975 \cdot 2^{60}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{51124153684035225880915656164628795 \cdot 2^{108}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{58299473499338415478237151766682067 \cdot 2^{105}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{2757734431089037080713292656218095 \cdot 2^{96}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{669299091533190268330215035928543 \cdot 2^{90}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{48943802969020581980217046479452311 \cdot 2^{109}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{865369553482007392632033823959723 \cdot 2^{104}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{50324951027765932351991762643119261 \cdot 2^{91}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{634444269542885120875377458175 \cdot 2^{60}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{25558961045141068635037080235237947 \cdot 2^{58}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{59337639454332849336823175942354505 \cdot 2^{51}}$
$x^{67100673}$	Kasami ( $i = 13$ )	$x^{99692100179105152473143578408569651 \cdot 2^{43}}$	
$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{47475325863759896471383067188604343 \cdot 2^{91}}$	



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
119	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{65942162196050547909997715719500595 \cdot 2^{49}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{13940822362506637821290075448760363 \cdot 2^{87}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{96476225500557085230936242710287525 \cdot 2^{63}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{1208926972536133780504575 \cdot 2^{0}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{6896866119604215834384910804229973 \cdot 2^{80}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{96520368450574880603982887047997869 \cdot 2^{113}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{110768986444050024092435292701939029 \cdot 2^{1}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{107280850995102174970441337682877141 \cdot 2^{114}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{37873224126402532991149589505692431 \cdot 2^{113}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{59160715712113978613172705963500765 \cdot 2^{112}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{100147314755157839944937406569690715 \cdot 2^{92}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{94944857195476858630139724300138205 \cdot 2^{28}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{107363141099917760386870613645104309 \cdot 2^{95}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{38484045387535506862110348867573399 \cdot 2^{102}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{81763385739079794619084297994175 \cdot 2^{14}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{99578573622735278912031429063710413 \cdot 2^{112}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{28446513528470962260604834362526453 \cdot 2^{112}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{60419454391373146928517905009686109 \cdot 2^{34}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{132922799578491587290380925930360013 \cdot 2^{1}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{201487636602438195784363 \cdot 2^{40}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{117284823157492577020940709729248685 \cdot 2^{112}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{5835635103445972129442749063111671 \cdot 2^{100}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{58162850940625282639356064031153459 \cdot 2^{19}}$
	$x^{1237940039285345090527035393}$	Kasami ( $i = 45$ )	$x^{97871274145293674493608446827616845 \cdot 2^{95}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{58287731074072403418790517442956387 \cdot 2^{29}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{37894662639457162701494864787036627 \cdot 2^{27}}$
	$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{25562074556590211364859023050165957 \cdot 2^{26}}$
	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{53514156492091822837749140253936739 \cdot 2^{1}}$
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{59155817906100976699229081326659305 \cdot 2^{48}}$
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{13521606200971406005808147376811 \cdot 2^{14}}$
	$x^{324518553658426708768757511094273}$	Kasami ( $i = 54$ )	$x^{110714966029025651508054757703593301 \cdot 2^{45}}$
	$x^{1298074214633706871103827063341057}$	Kasami ( $i = 55$ )	$x^{110553498219805229345093117059443541 \cdot 2^{56}}$
	$x^{20769187434139310370006797241024513}$	Kasami ( $i = 57$ )	$x^{23264633795667946269237612610700411 \cdot 2^{110}}$
	$x^{83076749736557241768257565115809793}$	Kasami ( $i = 58$ )	$x^{13656452011488861723709271230371307 \cdot 2^4}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
119	$x^{332306998946228967649491012766662657}$ $x^{576460752303423491}$ $x^{618970020219150889752985599}$ $x^{332306998946228968225951765070086143}$	Kasami ( $i = 59$ ) Welch Niho Inverse	$x^{47472428420889852686058931053358519 \cdot 2^{22}}$ $x^{39094941052497526080554856340073773 \cdot 2^{59}}$ $x^{412646679761793425324288683 \cdot 2^{60}}$ $x^{332306998946228968225951765070086143 \cdot 2^{22}}$
121	$x^3$ $x^5$ $x^9$ $x^{17}$ $x^{33}$ $x^{65}$ $x^{129}$ $x^{257}$ $x^{513}$ $x^{1025}$ $x^{4097}$ $x^{8193}$ $x^{16385}$ $x^{32769}$ $x^{65537}$ $x^{131073}$ $x^{262145}$ $x^{524289}$ $x^{1048577}$ $x^{2097153}$ $x^{8388609}$ $x^{16777217}$ $x^{33554433}$ $x^{67108865}$ $x^{134217729}$ $x^{268435457}$ $x^{536870913}$ $x^{1073741825}$ $x^{2147483649}$ $x^{4294967297}$	Gold ( $i = 1$ ) Gold ( $i = 2$ ) Gold ( $i = 3$ ) Gold ( $i = 4$ ) Gold ( $i = 5$ ) Gold ( $i = 6$ ) Gold ( $i = 7$ ) Gold ( $i = 8$ ) Gold ( $i = 9$ ) Gold ( $i = 10$ ) Gold ( $i = 12$ ) Gold ( $i = 13$ ) Gold ( $i = 14$ ) Gold ( $i = 15$ ) Gold ( $i = 16$ ) Gold ( $i = 17$ ) Gold ( $i = 18$ ) Gold ( $i = 19$ ) Gold ( $i = 20$ ) Gold ( $i = 21$ ) Gold ( $i = 23$ ) Gold ( $i = 24$ ) Gold ( $i = 25$ ) Gold ( $i = 26$ ) Gold ( $i = 27$ ) Gold ( $i = 28$ ) Gold ( $i = 29$ ) Gold ( $i = 30$ ) Gold ( $i = 31$ ) Gold ( $i = 32$ )	$x^{886151997189943915269204706853563051 \cdot 2^{120}}$ $x^{531691198313966349161522824112137831 \cdot 2^{119}}$ $x^{295383999063314638423068235617854351 \cdot 2^{118}}$ $x^{156379764209990102694565536503569951 \cdot 2^{117}}$ $x^{80559272471813083206291336986687551 \cdot 2^{116}}$ $x^{40899322947228180704732524931702911 \cdot 2^{115}}$ $x^{26790641775509932320922353234798195 \cdot 2^{108}}$ $x^{444800029717909591711001584373967573 \cdot 2^{106}}$ $x^{430120560039563420861660764145296813 \cdot 2^{105}}$ $x^{2593615601531543166641574751766527 \cdot 2^{111}}$ $x^{648878689668008724873715919101951 \cdot 2^{109}}$ $x^{78199425603360118484027218730032911 \cdot 2^{96}}$ $x^{78041948852309372580620225327414815 \cdot 2^{103}}$ $x^{8112716261008366888510913380351 \cdot 2^{106}}$ $x^{397731983419170854138023657660537267 \cdot 2^{91}}$ $x^{398769412848217878238260368072356659 \cdot 2^{89}}$ $x^{382656621068128178163072740701203611 \cdot 2^{92}}$ $x^{397722081925737317864597252230008219 \cdot 2^{99}}$ $x^{2535298782607125414545249533951 \cdot 2^{101}}$ $x^{428783878717712612218169720519186101 \cdot 2^{80}}$ $x^{429442893383685222616076058064802485 \cdot 2^{76}}$ $x^{443076025004357888267314419721393493 \cdot 2^{74}}$ $x^{430044352742592784661248850789215533 \cdot 2^{77}}$ $x^{5172053985942822942459061216346623 \cdot 2^{87}}$ $x^{443021915470938608615696455455913301 \cdot 2^{82}}$ $x^{442208927238232660284487422086392661 \cdot 2^{85}}$ $x^{428783225724620642334943975554069933 \cdot 2^{89}}$ $x^{2475880076264917542732038143 \cdot 2^{91}}$ $x^{379779428074513128663327459933346669 \cdot 2^{60}}$ $x^{146529070440477026587731484041529231 \cdot 2^{61}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
121	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{146605730676705179440075971475509007 \cdot 2^{57}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{147691717835822346273169179175088583 \cdot 2^{55}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{37996468546979840833922550351653741 \cdot 2^{60}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{146539281486541624433841087720776647 \cdot 2^{48}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{381251440651524984501700154143492461 \cdot 2^{46}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{390949410525117483303427343213473069 \cdot 2^{44}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{443075988595374932907807413070288213 \cdot 2^{42}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{398768398735535208162122959494001459 \cdot 2^{43}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{397761407829578243147180544009333915 \cdot 2^{46}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{380148862607748607845500183050396891 \cdot 2^{45}}$
	$x^{35184372088833}$	Gold ( $i = 45$ )	$x^{379785221987615726450328879644620507 \cdot 2^{47}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{257280400452761148651114035859279475 \cdot 2^{59}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{20447184526984109131447854961778815 \cdot 2^{61}}$
	$x^{281474976710657}$	Gold ( $i = 48$ )	$x^{265845591234167867627652374129226547 \cdot 2^{51}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{258460994778835790082819365130760647 \cdot 2^{52}}$
	$x^{112589906842625}$	Gold ( $i = 50$ )	$x^{257311644481880311064528295637227751 \cdot 2^{53}}$
	$x^{2251799813685249}$	Gold ( $i = 51$ )	$x^{439667702180348822810949064174688949 \cdot 2^{59}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{443072618167581029921138605273339221 \cdot 2^{53}}$
	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{10303778525021169759102110546231551 \cdot 2^{61}}$
	$x^{18014398509481985}$	Gold ( $i = 54$ )	$x^{265813143339725650626217283854693171 \cdot 2^{55}}$
	$x^{72057594037927937}$	Gold ( $i = 56$ )	$x^{265325353366069331665207995866703667 \cdot 2^{57}}$
	$x^{144115188075855873}$	Gold ( $i = 57$ )	$x^{439587211204460376713004072828234453 \cdot 2^{58}}$
	$x^{288230376151711745}$	Gold ( $i = 58$ )	$x^{257269934668048234655365500293586151 \cdot 2^{61}}$
	$x^{576460752303423489}$	Gold ( $i = 59$ )	$x^{379779427367118822147283736773637851 \cdot 2^{61}}$
	$x^{1152921504606846977}$	Gold ( $i = 60$ )	$x^{2305843009213693951 \cdot 2^{61}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{204496614736140903523662624658514555 \cdot 2^{115}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{233197893997353661912948607066727123 \cdot 2^{113}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{11030937724356148322853170624733167 \cdot 2^{109}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{2677196366132761073320860141551583 \cdot 2^{106}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{236644111324961467082800265133008089 \cdot 2^{94}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{214056645934976302839525551074274403 \cdot 2^{92}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{3461478213928029570528135295838891 \cdot 2^{105}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{2774972313499142118081665220669781 \cdot 2^{68}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{2537777078171540481300339096575 \cdot 2^{91}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
121	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{189982421943718904167476272294340023 \cdot 2^{86}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{153936330430623453075638622296118927 \cdot 2^{49}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{231607908393978238374394076813487197 \cdot 2^{45}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{237360693449334481346339682495869513 \cdot 2^{49}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{39876636653304629694377023255359443 \cdot 2^{68}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{102251427744730352020812775196937925 \cdot 2^{20}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{398232877760397023178081036158987467 \cdot 2^{56}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{104664260531398215223731645547625077 \cdot 2^{22}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{2417853945072267562057727 \cdot 2^{61}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{428783224456730447949463492295841461 \cdot 2^{117}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{13842850165848691486143509261845163 \cdot 2^{24}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{443075985390278992318387057772025173 \cdot 2^{99}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{385910462027572338845704422534000045 \cdot 2^{106}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{237269783284658188639523742583174889 \cdot 2^{116}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{54086426012663869684172710390443 \cdot 2^{41}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{442213992888873416096601106321419093 \cdot 2^{85}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{430042039908775182368837860635350197 \cdot 2^{103}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{189889714037256564331663729429802423 \cdot 2^{32}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{54625808054434488165044771474888171 \cdot 2^{32}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{151492878082147876247943035169723091 \cdot 2^{105}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{230270827625910078358240371054956187 \cdot 2^{113}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{230282964800676485358790434936908243 \cdot 2^{109}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{390348171365764969123934456122071885 \cdot 2^{31}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{23342540413783888499775271204832247 \cdot 2^{118}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{391555533642068241630587551864805741 \cdot 2^{116}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{469139292629970308083697644345183053 \cdot 2^{120}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{805950546409752783137451 \cdot 2^{41}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{531691198313966349161526342549346715 \cdot 2^{118}}$
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{241677817416611541322742742280989853 \cdot 2^{36}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{113786054113883849042350337747643157 \cdot 2^{116}}$
	$x^{1237940039285345090527035393}$	Kasami ( $i = 45$ )	$x^{236721837158473562341113470483479117 \cdot 2^{18}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{263770724503909752997829304592747827 \cdot 2^{20}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{164794422078387818639665298145215 \cdot 2^{21}}$
	$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{203697799930054007858909276213227835 \cdot 2^{83}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
121	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{46548485873485407635053038374097399 \cdot 2^{84}}$
	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{235747026762275665400464125647752291 \cdot 2^{94}}$
	$x^{5070602400912915354186999136257}$	Kasami ( $i = 51$ )	$x^{429120868998364060354081651342269109 \cdot 2^{116}}$
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{443072618244952282374223072640849237 \cdot 2^{53}}$
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{185433423467246554088250922421298359 \cdot 2^{54}}$
	$x^{324518553658426708768757511094273}$	Kasami ( $i = 54$ )	$x^{265878051012469895078006151516992307 \cdot 2^{96}}$
	$x^{5192296858534827556472902291292161}$	Kasami ( $i = 56$ )	$x^{102398181912958683687323968797106811 \cdot 2^{115}}$
	$x^{20769187434139310370006797241024513}$	Kasami ( $i = 57$ )	$x^{439668340881561790141931084437605077 \cdot 2^{108}}$
	$x^{83076749736557241768257565115809793}$	Kasami ( $i = 58$ )	$x^{93058535182671500260618110859183355 \cdot 2^{119}}$
	$x^{332306998946228967649491012766662657}$	Kasami ( $i = 59$ )	$x^{400589259003673285862555369585088205 \cdot 2^{58}}$
	$x^{1329227995784915871750885555673497601}$	Kasami ( $i = 60$ )	$x^{379779427367118822147283736773637853 \cdot 2^{120}}$
	$x^{1152921504606846979}$	Welch	$x^{136832293683741339908609028467396367 \cdot 2^{64}}$
	$x^{1152921505680588799}$	Niho	$x^{412646680146100593168657067 \cdot 2^{92}}$
	$x^{1329227995784915872903807060280344575}$	Inverse	$x^{1329227995784915872903807060280344575 \cdot 2^{2}}$
123	$x^3$	Gold ( $i = 1$ )	$x^{3544607988759775661076818827414252203 \cdot 2^{122}}$
	$x^5$	Gold ( $i = 2$ )	$x^{2126764793255865396646091296448551323 \cdot 2^{120}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{1876557170519881232334786438042839405 \cdot 2^{117}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{1611185449436261664125826739733751003 \cdot 2^{117}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{1566222134568272966522315295834204525 \cdot 2^{110}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{1034418673762580445839538568311552231 \cdot 2^{110}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{1525045973700547381985245954038717293 \cdot 2^{111}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{1063901372907399722577961727115552563 \cdot 2^{102}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{1758675878714571959267334130774923957 \cdot 2^{99}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{1033853010575707530319567725127416263 \cdot 2^{101}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{1715216643232658887952288866957448885 \cdot 2^{92}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{1720178599383706560660360019172502829 \cdot 2^{91}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{1768845850138351911893080610641980245 \cdot 2^{96}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{1519120606952798262890538977748432603 \cdot 2^{102}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{312148744679339489498812564312563471 \cdot 2^{80}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{41215119051995361591626434323906815 \cdot 2^{85}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{1595073610787531078100801777831195443 \cdot 2^{77}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{1030409299672246113364755352685168243 \cdot 2^{79}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{161039835965954925249637072383375423 \cdot 2^{90}}$
$x^{536870913}$	Gold ( $i = 29$ )	$x^{1758348854799342240274690949504133845 \cdot 2^{88}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
123	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{4951760154835678092530286591 \cdot 2^{62}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{1029079739950066522503231170173062771 \cdot 2^{60}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{1530616341873146208580580456531715291 \cdot 2^{62}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{1772290472825066624590723338648376661 \cdot 2^{54}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{1297757379345459877432974479724543 \cdot 2^{50}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{1594814486170795589910199756097624499 \cdot 2^{51}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{590767998127166577210409700841779655 \cdot 2^{44}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{81798645894465660838846768519311423 \cdot 2^{44}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{2068821594316800946063928898314655 \cdot 2^{53}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{162254325220169643549665517404159 \cdot 2^{47}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{586118835622466352294617272012752783 \cdot 2^{62}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{1772303941561115969273266756103001429 \cdot 2^{51}}$
	$x^{1125899906842625}$	Gold ( $i = 50$ )	$x^{586424111126982771930005652118638351 \cdot 2^{54}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{312167161621411789359312314310344223 \cdot 2^{62}}$
	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{1063374283602194353750669854117409587 \cdot 2^{54}}$
	$x^{36028797018963969}$	Gold ( $i = 55$ )	$x^{590695874088279207214708498846249415 \cdot 2^{56}}$
	$x^{72057594037927937}$	Gold ( $i = 56$ )	$x^{1771438188813507890765663464715890005 \cdot 2^{57}}$
	$x^{288230376151711745}$	Gold ( $i = 58$ )	$x^{1590887050073285148519451132913572275 \cdot 2^{60}}$
	$x^{576460752303423489}$	Gold ( $i = 59$ )	$x^{1715132897786988227862136612931941805 \cdot 2^{61}}$
	$x^{2305843009213693953}$	Gold ( $i = 61$ )	$x^{4611686018427387903 \cdot 2^{62}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{817986458944563614094650498634058203 \cdot 2^{118}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{1544331281409860765199443887462641069 \cdot 2^{109}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{760323767981704144823124280200640217 \cdot 2^{109}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{1519491485124369599682865867653868909 \cdot 2^{82}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{884998171118634572079028661759160775 \cdot 2^{85}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{1519123510101796818268308183952616301 \cdot 2^{91}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{811583453681116072696274999636162091 \cdot 2^{64}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{1758670887340333569694448623614249653 \cdot 2^{47}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{886133968381474502651416371695219143 \cdot 2^{58}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{1717731622448116055245356671002399413 \cdot 2^{55}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{1544288191788830627756253225564808629 \cdot 2^{69}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{1768835689126509457491854744947698517 \cdot 2^{58}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{759558854734928457072196110892438089 \cdot 2^{64}}$
$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{1102921076738597456513563280403099191 \cdot 2^{122}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
123	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{1134876015815828815707110840939613641 \cdot 2^{118}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{766862309831384099512312705712894267 \cdot 2^{104}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{811747240765009887309264817338289863 \cdot 2^{118}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{1104301689947768101290533241241702841 \cdot 2^{86}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{1758512371823249006545878528230247125 \cdot 2^{103}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{1139338282455053616817569309808431689 \cdot 2^{95}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{895374016588610485406342137343348423 \cdot 2^{22}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{759651936462498144862425792437401305 \cdot 2^{17}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{1772310755157298728660157630589392213 \cdot 2^{108}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{1139430979057023320878385857080028745 \cdot 2^{113}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{766961962480185376958150864410544603 \cdot 2^{118}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{1181535996253258553692274897158755671 \cdot 2^{122}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{1145181042522389059732649270383908281 \cdot 2^{113}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{1140078592875951236019421709355757001 \cdot 2^{109}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{1139349871696015046446690428167877193 \cdot 2^{95}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{1103074920816986934160263449330030023 \cdot 2^{22}}$
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{1772304100017436275435459073545688405 \cdot 2^{76}}$
	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{1103072227635532470740812611843755607 \cdot 2^{88}}$
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{1102921235513492163267569442445685433 \cdot 2^{116}}$
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{81159597630099644197400477855645243 \cdot 2^{115}}$
	$x^{1298074214633706871103827063341057}$	Kasami ( $i = 55$ )	$x^{1107699010891714972304550752325235143 \cdot 2^{101}}$
	$x^{5192296858534827556472902291292161}$	Kasami ( $i = 56$ )	$x^{1771439456464259234686487993044872533 \cdot 2^{102}}$
	$x^{83076749736557241768257565115809793}$	Kasami ( $i = 58$ )	$x^{765676539448078763323702005444398555 \cdot 2^{113}}$
	$x^{332306998946228967649491012766662657}$	Kasami ( $i = 59$ )	$x^{1720325353106683934583514230211122613 \cdot 2^{120}}$
	$x^{5316911983139663489309385231907684353}$	Kasami ( $i = 61$ )	$x^{1519117709468475285295073505360702903 \cdot 2^{62}}$
	$x^{2305843009213693955}$	Welch	$x^{605971586313711647966873545964719887 \cdot 2^{67}}$
$x^{4951760159447364108810190847}$	Niho	$x^{1650586720584402372674628267 \cdot 2^{93}}$	
$x^{5316911983139663491615228241121378303}$	Inverse	$x^{5316911983139663491615228241121378303 \cdot 2^2}$	
125	$x^3$	Gold ( $i = 1$ )	$x^{14178431955039102644307275309657008811 \cdot 2^{124}}$
	$x^5$	Gold ( $i = 2$ )	$x^{8507059173023461586584365185794205287 \cdot 2^{123}}$
	$x^9$	Gold ( $i = 3$ )	$x^{4726143985013034214769091769885669607 \cdot 2^{120}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{7506228682079524929339145752171357613 \cdot 2^{118}}$
	$x^{65}$	Gold ( $i = 6$ )	$x^{7198280838712159804032924387979712181 \cdot 2^{115}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{329730975698583782425750588596674687 \cdot 2^{112}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
125	$x^{257}$	Gold ( $i = 8$ )	$x^{6123758548674476239370068324404389083 \cdot 2^{111}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{82914806754614635346826171401503231 \cdot 2^{108}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{2345772783190949632220676588566972303 \cdot 2^{107}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{4121677436771191420397843518135586419 \cdot 2^{109}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{4116988846703042254461980710566829287 \cdot 2^{102}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{7089648642516653522417424877144946005 \cdot 2^{99}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{6076841710561871220470071199062481773 \cdot 2^{94}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{644164414427516393512392517673416767 \cdot 2^{97}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{7089243020629194914636126939909936469 \cdot 2^{91}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{4135088653298398532170410872197822695 \cdot 2^{101}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{20282399932249725190733259866111 \cdot 2^{84}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{7033400489798551503754289115257203413 \cdot 2^{82}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{2362783813304418861179381907168224199 \cdot 2^{83}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{1248668725713956056118671365683837983 \cdot 2^{82}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{644474189377918160640965176902843423 \cdot 2^{79}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{6100021793828301552863860920958995309 \cdot 2^{89}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{4253010372673444035656793893307314995 \cdot 2^{85}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{4245205693548712858026911455452751667 \cdot 2^{88}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{19807040619342712365826179071 \cdot 2^{94}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{6076470840703478365268032045359937243 \cdot 2^{63}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{6363548200605062456519962011791445403 \cdot 2^{63}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{7085752756492576065185748661345889621 \cdot 2^{58}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{6380290323316624019615454286111683379 \cdot 2^{57}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{6861200256473458094508245301197059501 \cdot 2^{62}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{6860866414554098410484684629541017269 \cdot 2^{50}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{164860476130912434553555461890572543 \cdot 2^{55}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{6380294379768563330593965702636581683 \cdot 2^{45}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{7089215977521163223246457893402531157 \cdot 2^{43}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{2345696463149869318739359765615283983 \cdot 2^{47}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{4245286312119268541611034222417200755 \cdot 2^{47}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{7033405599080638724916583808945969845 \cdot 2^{48}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{649017300578451730840287862390783 \cdot 2^{63}}$
	$x^{281474976710657}$	Gold ( $i = 48$ )	$x^{7075383360939401948159905384141073237 \cdot 2^{59}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{6364182524673020364018240884240182427 \cdot 2^{58}}$



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
125	$x^{2251799813685249}$	Gold ( $i = 51$ )	$x^{6122504669444139914409585378350754971 \cdot 2^{53}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{20748914918394006695604327474529279 \cdot 2^{53}}$
	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{6255188182229217272805654453163748653 \cdot 2^{58}}$
	$x^{18014398509481985}$	Gold ( $i = 54$ )	$x^{4135371479649883602588284635663200711 \cdot 2^{57}}$
	$x^{72057594037927937}$	Gold ( $i = 56$ )	$x^{6880633258610723259681020506716613933 \cdot 2^{58}}$
	$x^{144115188075855873}$	Gold ( $i = 57$ )	$x^{6379255413087940247446374212028701491 \cdot 2^{59}}$
	$x^{288230376151711745}$	Gold ( $i = 58$ )	$x^{1248589898193267430083677596657000207 \cdot 2^{59}}$
	$x^{576460752303423489}$	Gold ( $i = 59$ )	$x^{2344465126423788663408025703720018887 \cdot 2^{60}}$
	$x^{2305843009213693953}$	Gold ( $i = 61$ )	$x^{6076470837873901143815543174829890413 \cdot 2^{62}}$
	$x^{4611686018427387905}$	Gold ( $i = 62$ )	$x^{9223372036854775807 \cdot 2^{63}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{3271945835778254456378601994536232803 \cdot 2^{122}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{746233260791531718121435542613529079 \cdot 2^{108}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{6177325125639443060797775549850564013 \cdot 2^{114}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{221483067981022431587244816391865003 \cdot 2^{114}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{2616429591260214549604590522728319 \cdot 2^{84}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{3786287040213793851169693026927326797 \cdot 2^{81}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{3050091868095637072271259268721550519 \cdot 2^{109}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{3684160762636183937725029862104059291 \cdot 2^{62}}$
	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{4220291027245767168108353693742123827 \cdot 2^{56}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{824948892364197708047704098523022459 \cdot 2^{53}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{865382806531805653846685072927403 \cdot 2^{98}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{874048492344558755151487607820015083 \cdot 2^{97}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{3786285181953255202217928143691539677 \cdot 2^{72}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{7089161890990780307958934767712032085 \cdot 2^{55}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{3719500713245947604911084719164464307 \cdot 2^{58}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{19342822337206103647977471 \cdot 2^0}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{7033395379427326865687330013985467093 \cdot 2^{119}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{2423800432797551143679419067905237459 \cdot 2^2}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{2463020658118729329529721282234709655 \cdot 2^{78}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{21417580822609221400771698651856863 \cdot 2^{105}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{6263600536476018185454166326430091629 \cdot 2^{96}}$
$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{4254048816199518616396000304955601715 \cdot 2^{85}}$	
$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{3259090103388237429904747069882820451 \cdot 2^{95}}$	
$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{6076470840703478369879718063787325147 \cdot 2^{94}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$	
125	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{6373010938762634461298233272471689805 \cdot 2^{100}}$	
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{3222369679239009464450081590535679133 \cdot 2^{105}}$	
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{7085755291793474142687770585416248661 \cdot 2^{104}}$	
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{3220822072137581967562103324781697339 \cdot 2^{114}}$	
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{443914287026857470646815927856447317 \cdot 2^{112}}$	
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{6871245940143401135089025189295052469 \cdot 2^{116}}$	
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{3806660720679419192662487730507818729 \cdot 2^{35}}$	
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{8507059173023461586584368704231414171 \cdot 2^{124}}$	
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{3223802185639011132549803 \cdot 2^{42}}$	
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{2502076227360979455649156470339195603 \cdot 2^{41}}$	
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{1648654878492918912129870114983961211 \cdot 2^{112}}$	
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{6868570297794777004626784587815934677 \cdot 2^{21}}$	
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{3038096341679037340649773543107145143 \cdot 2^{33}}$	
	$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{7075383400553407647572463179787840341 \cdot 2^{107}}$	
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{1675924964773296363943009667481172597 \cdot 2^{30}}$	
	$x^{5070602400912915354186999136257}$	Kasami ( $i = 51$ )	$x^{6371727351435864836528312386034756811 \cdot 2^{81}}$	
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{20302216634830891860988113452031 \cdot 2^{84}}$	
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{882472324771411452289989974597654571 \cdot 2^1}$	
	$x^{324518553658426708768757511094273}$	Kasami ( $i = 54$ )	$x^{3730437565403809334613041334683646563 \cdot 2^{121}}$	
	$x^{5192296858534827556472902291292161}$	Kasami ( $i = 56$ )	$x^{6880709634560595927639135230673335597 \cdot 2^{45}}$	
	$x^{20769187434139310370006797241024513}$	Kasami ( $i = 57$ )	$x^{1632778048901500799224730226033910469 \cdot 2^{47}}$	
	$x^{83076749736557241768257565115809793}$	Kasami ( $i = 58$ )	$x^{3705727147121452826124635267747441821 \cdot 2^{57}}$	
	$x^{332306998946228967649491012766662657}$	Kasami ( $i = 59$ )	$x^{352893812966823021744246683736228855 \cdot 2^{112}}$	
	$x^{5316911983139663489309385231907684353}$	Kasami ( $i = 61$ )	$x^{6409428144058772492938446138196253517 \cdot 2^{120}}$	
	$x^{21267647932558653961849226946058125313}$	Kasami ( $i = 62$ )	$x^{3038235418936950567296085568987557303 \cdot 2^2}$	
	$x^{4611686018427387907}$	Welch	$x^{1876557170519881232741699910257020687 \cdot 2^{65}}$	
	$x^{4611686020574871551}$	Niho	$x^{6602346876188694800893651627 \cdot 2^{63}}$	
	$x^{21267647932558653966460912964485513215}$	Inverse	$x^{21267647932558653966460912964485513215 \cdot 2^2}$	
	$x^{1267650638007162390353805311999}$	Dobbertin	$x^{7089216083157104489417170184312280405 \cdot 2^1}$	
	127	$x^3$	Gold ( $i = 1$ )	$x^{56713727820156410577229101238628035243 \cdot 2^{126}}$
		$x^5$	Gold ( $i = 2$ )	$x^{34028236692093846346337460743176821147 \cdot 2^{124}}$
		$x^9$	Gold ( $i = 3$ )	$x^{18904575940052136859076367079542678415 \cdot 2^{124}}$
$x^{17}$		Gold ( $i = 4$ )	$x^{10008304909439366572452194336228476815 \cdot 2^{120}}$	
$x^{33}$		Gold ( $i = 5$ )	$x^{25778967190980186626013227835740016027 \cdot 2^{119}}$	

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
127	$x^{65}$	Gold ( $i = 6$ )	$x^{28793123354848639216131697551918848693 \cdot 2^{116}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{1318923902794335129703002354386698495 \cdot 2^{120}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{662027951208051485337304683719393535 \cdot 2^{112}}$
	$x^{513}$	Gold ( $i = 9$ )	$x^{331659227018458541387304685606011903 \cdot 2^{118}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{946150971438706947190846469444286919 \cdot 2^{111}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{27484983760573604540355538081970542261 \cdot 2^{106}}$
	$x^{4097}$	Gold ( $i = 12$ )	$x^{25456808753055318294245622938207702427 \cdot 2^{112}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{24317750010034110869987285811216931693 \cdot 2^{102}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{2835859457006661408966969508579775829 \cdot 2^{100}}$
	$x^{32769}$	Gold ( $i = 15$ )	$x^{2813619802777877709237800934919465685 \cdot 2^{106}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{2596108815790610368672464466149375 \cdot 2^{96}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{28301696176852674917381751260117838549 \cdot 2^{95}}$
	$x^{262145}$	Gold ( $i = 18$ )	$x^{28356972082516779658544507759639614805 \cdot 2^{92}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{1308780830603107087072005889664217151 \cdot 2^{96}}$
	$x^{1048577}$	Gold ( $i = 20$ )	$x^{28133622401273705872112459580351273653 \cdot 2^{102}}$
	$x^{2097153}$	Gold ( $i = 21$ )	$x^{81129599728998900762933035270143 \cdot 2^{106}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{16465296755430976438080589815378202227 \cdot 2^{84}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{28343021167173896570606967170764811605 \cdot 2^{82}}$
	$x^{16777217}$	Gold ( $i = 24$ )	$x^{24400092241002192912540277794355759469 \cdot 2^{80}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{25521177772600497249612828445273961267 \cdot 2^{79}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{16541503982758135899990814291631305159 \cdot 2^{81}}$
	$x^{134217729}$	Gold ( $i = 27$ )	$x^{24329527208129015228931449564553749723 \cdot 2^{83}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{25520917935919690046670331261698546483 \cdot 2^{88}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{25018317656025231224773139741006326125 \cdot 2^{92}}$
	$x^{1073741825}$	Gold ( $i = 30$ )	$x^{25454192841098565347185904709582772659 \cdot 2^{92}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{24305883396768840234452957367014710125 \cdot 2^{94}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{39614081247908796764212166655 \cdot 2^{64}}$
	$x^{8589934593}$	Gold ( $i = 33$ )	$x^{16465275821310834119358157314151652583 \cdot 2^{64}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{16980822616668798666131651082603783795 \cdot 2^{62}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{27522533034520273146695317468516558253 \cdot 2^{63}}$
	$x^{68719476737}$	Gold ( $i = 36$ )	$x^{17013988538873049699278083439188194099 \cdot 2^{56}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{2577895489879829662948148356040424479 \cdot 2^{59}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{20764117450632877819972770370428927 \cdot 2^{64}}$
	$x^{549755813889}$	Gold ( $i = 39$ )	$x^{28301533443912350002690337518407297877 \cdot 2^{50}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
127	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{16486548784929788898438345994306111091 \cdot 2^{48}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{27522838500959395886779642343248964909 \cdot 2^{47}}$
	$x^{4398046511105}$	Gold ( $i = 42$ )	$x^{28356863910084652892985829374586869077 \cdot 2^{44}}$
	$x^{8796093022209}$	Gold ( $i = 43$ )	$x^{17014118346048857454480114657877242675 \cdot 2^{44}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{4994674893252420317318999384297339935 \cdot 2^{49}}$
	$x^{35184372088833}$	Gold ( $i = 45$ )	$x^{16467945286300283049761212029748058343 \cdot 2^{48}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{17012042440929055223650996223155267379 \cdot 2^{49}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{27442210106204153949413980887030478253 \cdot 2^{49}}$
	$x^{281474976710657}$	Gold ( $i = 48$ )	$x^{2430625420720619757622424275927065947 \cdot 2^{64}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{25517031778694043849157099048548538803 \cdot 2^{62}}$
	$x^{112589906842625}$	Gold ( $i = 50$ )	$x^{25020762236314579692527520435625864493 \cdot 2^{55}}$
	$x^{2251799813685249}$	Gold ( $i = 51$ )	$x^{28356863064977817729439279240545916245 \cdot 2^{52}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{2576657340799796161832587999209320511 \cdot 2^{58}}$
	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{82995659673557146530855062670936063 \cdot 2^{64}}$
	$x^{18014398509481985}$	Gold ( $i = 54$ )	$x^{9452269941183145151670489477476315591 \cdot 2^{58}}$
	$x^{36028797018963969}$	Gold ( $i = 55$ )	$x^{5004114275775031836261754142180970255 \cdot 2^{56}}$
	$x^{72057594037927937}$	Gold ( $i = 56$ )	$x^{9382766762690142583739445561640060815 \cdot 2^{64}}$
	$x^{144115188075855873}$	Gold ( $i = 57$ )	$x^{24489861469892958934136365561016446107 \cdot 2^{59}}$
	$x^{288230376151711745}$	Gold ( $i = 58$ )	$x^{16540349540123779807387152365065746887 \cdot 2^{61}}$
	$x^{576460752303423489}$	Gold ( $i = 59$ )	$x^{4994359592773069433850638040328584735 \cdot 2^{64}}$
	$x^{1152921504606846977}$	Gold ( $i = 60$ )	$x^{9377860505695154514192147612036220815 \cdot 2^{64}}$
	$x^{2305843009213693953}$	Gold ( $i = 61$ )	$x^{27442126364591811607710585138607478453 \cdot 2^{62}}$
	$x^{4611686018427387905}$	Gold ( $i = 62$ )	$x^{24305883351495604543639182858674616027 \cdot 2^{64}}$
	$x^{9223372036854775809}$	Gold ( $i = 63$ )	$x^{18446744073709551615 \cdot 2^{64}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{13087783343113017825514407978144931211 \cdot 2^{123}}$
	$x^{57}$	Kasami ( $i = 3$ )	$x^{2984933043166126872485742170454107127 \cdot 2^{118}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{14825580301534663345914661319641353883 \cdot 2^{111}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{7367644399597358473779007109550406261 \cdot 2^{98}}$
	$x^{4033}$	Kasami ( $i = 6$ )	$x^{885932271924089726348979265567460011 \cdot 2^{115}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{10465718365040858198418361549848447 \cdot 2^{106}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{12200041049898997774789422170218800311 \cdot 2^{105}}$
	$x^{261633}$	Kasami ( $i = 9$ )	$x^{15185266288982724007165113839133472457 \cdot 2^{85}}$
	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{14736648168559256479348714698018449811 \cdot 2^{94}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{27442147311495679031425500090848728757 \cdot 2^{62}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
127	$x^{16773121}$	Kasami ( $i = 12$ )	$x^{25519035680894431812279566600788954323 \cdot 2^{69}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{3496193830709909780982741064217023979 \cdot 2^{92}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{3461531226127222615386740291709611 \cdot 2^{99}}$
	$x^{1073709057}$	Kasami ( $i = 15$ )	$x^{28136177824597336572405923602423425749 \cdot 2^{61}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{15191084375805419973127092273765265993 \cdot 2^{51}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{110769848050341863993891817693074773 \cdot 2^{26}}$
	$x^{68719214593}$	Kasami ( $i = 18$ )	$x^{28356647563963121231835739002128520533 \cdot 2^{74}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{15142586099743496909647175139368576217 \cdot 2^{61}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{27463734338107847415951433375886953109 \cdot 2^{68}}$
	$x^{4398044413953}$	Kasami ( $i = 21$ )	$x^{38685644674412207298052095 \cdot 2^{64}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{13721062528024628248852946202773261411 \cdot 2^{23}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{28343011023493214961348899843873615189 \cdot 2^{117}}$
	$x^{281474959933441}$	Kasami ( $i = 24$ )	$x^{24981628855637747375861000069346643245 \cdot 2^{118}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{12883286723806021437729024394432065851 \cdot 2^{110}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{14878025641896050884823168029859666387 \cdot 2^{110}}$
	$x^{18014398375264257}$	Kasami ( $i = 27$ )	$x^{25486925094524248204003155429393274573 \cdot 2^{96}}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{25521177487380086894706655542811349811 \cdot 2^{116}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{24729984178847061395763199129117477229 \cdot 2^{89}}$
	$x^{1152921503533105153}$	Kasami ( $i = 30$ )	$x^{12884487974160806228460544990248070301 \cdot 2^{105}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{25055037290445481112391583137552177741 \cdot 2^{101}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{12152941678577379497883766317681175991 \cdot 2^{33}}$
	$x^{73786976286248271873}$	Kasami ( $i = 33$ )	$x^{17545306602006418515732397372812664115 \cdot 2^{21}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{17047349552011419047797276742284817203 \cdot 2^{10}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{24698249369217983900294184627286226349 \cdot 2^{19}}$
	$x^{4722366482800925736961}$	Kasami ( $i = 36$ )	$x^{6543904153015535435361155346080444731 \cdot 2^{113}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{85671590921090142170694858290823135 \cdot 2^{112}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{12148491678950586007965983409653228983 \cdot 2^{40}}$
	$x^{302231454903107537862657}$	Kasami ( $i = 39$ )	$x^{28384529143161208415725464383424605013 \cdot 2^{120}}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{6594619513971675648515016135886619771 \cdot 2^{125}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{30024914728318099717356599566037001645 \cdot 2^{124}}$
	$x^{19342813113829668748787713}$	Kasami ( $i = 42$ )	$x^{12895208742556044530199211 \cdot 2^{43}}$
	$x^{77371252455327471088173057}$	Kasami ( $i = 43$ )	$x^{34028236692093846346337464261614030029 \cdot 2^{126}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{15467380314606868642869836402578844829 \cdot 2^{38}}$
	$x^{1237940039285345090527035393}$	Kasami ( $i = 45$ )	$x^{3310139756656819002673016318157620475 \cdot 2^{30}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
127	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{13036684140211649283492464424059742051 \cdot 2^{113}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{1775657148107429882582764784437608789 \cdot 2^{118}}$
	$x^{79228162514264056118567239681}$	Kasami ( $i = 48$ )	$x^{6951134386436169440873726627158551317 \cdot 2^{26}}$
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{6531091923118041923895164064102441669 \cdot 2^{110}}$
	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{3529889299395130191918182036666144811 \cdot 2^{97}}$
	$x^{5070602400912915354186999136257}$	Kasami ( $i = 51$ )	$x^{28356864332628417957668117787295700309 \cdot 2^{78}}$
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{12529613479603473535916650596625856663 \cdot 2^{100}}$
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{81169252476965124565472682966015 \cdot 2^{117}}$
	$x^{324518553658426708768757511094273}$	Kasami ( $i = 54$ )	$x^{9701043777057857567841641017258957267 \cdot 2^{94}}$
	$x^{1298074214633706871103827063341057}$	Kasami ( $i = 55$ )	$x^{352992531961959370174968052848926703 \cdot 2^{115}}$
	$x^{5192296858534827556472902291292161}$	Kasami ( $i = 56$ )	$x^{9695545381310808602873563182447907599 \cdot 2^{50}}$
	$x^{20769187434139310370006797241024513}$	Kasami ( $i = 57$ )	$x^{15145143229502584778886694880828536413 \cdot 2^{48}}$
	$x^{83076749736557241768257565115809793}$	Kasami ( $i = 58$ )	$x^{14921740284426271058879294435137899107 \cdot 2^{115}}$
	$x^{332306998946228967649491012766662657}$	Kasami ( $i = 59$ )	$x^{9851925740605719947187458524269024919 \cdot 2^{60}}$
	$x^{1329227995784915871750885555673497601}$	Kasami ( $i = 60$ )	$x^{1411575251867273354227389817774163959 \cdot 2^{124}}$
	$x^{5316911983139663489309385231907684353}$	Kasami ( $i = 61$ )	$x^{27525205649706942918711497085232502453 \cdot 2^{62}}$
	$x^{21267647932558653961849226946058125313}$	Kasami ( $i = 62$ )	$x^{25637712576235089721080221249773024861 \cdot 2^{126}}$
	$x^{85070591730234615856620279821087277057}$	Kasami ( $i = 63$ )	$x^{24305883351495604543639182858674616029 \cdot 2^{126}}$
	$x^{9223372036854775811}$	Welch	$x^{10008304909439366780791892109889295055 \cdot 2^{58}}$
	$x^{39614081266355540833626750975}$	Niho	$x^{26409387504754779199279639211 \cdot 2^{64}}$
$x^{85070591730234615865843651857942052863}$	Inverse	$x^{85070591730234615865843651857942052863 \cdot 2^2}$	
129	$x^3$	Gold ( $i = 1$ )	$x^{226854911280625642308916404954512140971 \cdot 2^{128}}$
	$x^5$	Gold ( $i = 2$ )	$x^{13611294676837538535349842972707284583 \cdot 2^{127}}$
	$x^{17}$	Gold ( $i = 4$ )	$x^{40033219637757466289808777344913907231 \cdot 2^{125}}$
	$x^{33}$	Gold ( $i = 5$ )	$x^{20623173752784149300810582268592012831 \cdot 2^{120}}$
	$x^{129}$	Gold ( $i = 7$ )	$x^{100238216612369469857428178933389085549 \cdot 2^{120}}$
	$x^{257}$	Gold ( $i = 8$ )	$x^{2648111804832205941349218734877573631 \cdot 2^{121}}$
	$x^{1025}$	Gold ( $i = 10$ )	$x^{113538116572644833662901576333331442517 \cdot 2^{111}}$
	$x^{2049}$	Gold ( $i = 11$ )	$x^{97318431925656388281863113692052793051 \cdot 2^{109}}$
	$x^{8193}$	Gold ( $i = 13$ )	$x^{83066609769544358223696962634391551 \cdot 2^{104}}$
	$x^{16385}$	Gold ( $i = 14$ )	$x^{66166592676845281940452334408154626503 \cdot 2^{104}}$
	$x^{65537}$	Gold ( $i = 16$ )	$x^{10384435263162441474689857864466431 \cdot 2^{113}}$
	$x^{131073}$	Gold ( $i = 17$ )	$x^{37514058593360652438303564253424116679 \cdot 2^{96}}$
	$x^{524289}$	Gold ( $i = 19$ )	$x^{37531148182720193611220338495275372303 \cdot 2^{99}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
129	$x^{1048577}$	Gold ( $i = 20$ )	$x^{67923615615022974978151423865976153907 \cdot 2^{101}}$
	$x^{4194305}$	Gold ( $i = 22$ )	$x^{97223626125547071616026512570365434733 \cdot 2^{86}}$
	$x^{8388609}$	Gold ( $i = 23$ )	$x^{19977440911354625822155932338390580767 \cdot 2^{88}}$
	$x^{33554433}$	Gold ( $i = 25$ )	$x^{110091354302103752873279705801913347373 \cdot 2^{81}}$
	$x^{67108865}$	Gold ( $i = 26$ )	$x^{113427457330513596272809871134732670293 \cdot 2^{79}}$
	$x^{268435457}$	Gold ( $i = 28$ )	$x^{109937340160906749726606712542688073397 \cdot 2^{91}}$
	$x^{536870913}$	Gold ( $i = 29$ )	$x^{37804536575552539447575629641163534791 \cdot 2^{88}}$
	$x^{2147483649}$	Gold ( $i = 31$ )	$x^{109768505621935065586628401289328514741 \cdot 2^{94}}$
	$x^{4294967297}$	Gold ( $i = 32$ )	$x^{158456324991635187048258732031 \cdot 2^{97}}$
	$x^{17179869185}$	Gold ( $i = 34$ )	$x^{112534326078323354847371464077841619637 \cdot 2^{63}}$
	$x^{34359738369}$	Gold ( $i = 35$ )	$x^{10206808661436122196778552167802706739 \cdot 2^{61}}$
	$x^{137438953473}$	Gold ( $i = 37$ )	$x^{113427239295435677136946756736460215637 \cdot 2^{57}}$
	$x^{274877906945}$	Gold ( $i = 38$ )	$x^{112544751547533805942686208611704990421 \cdot 2^{62}}$
	$x^{1099511627777}$	Gold ( $i = 40$ )	$x^{110090134668439600934392809540432471469 \cdot 2^{55}}$
	$x^{2199023255553}$	Gold ( $i = 41$ )	$x^{10306629382701575933027649491266957375 \cdot 2^{53}}$
	$x^{17592186044417}$	Gold ( $i = 44$ )	$x^{66166015790183016307131558191257383367 \cdot 2^{47}}$
	$x^{70368744177665}$	Gold ( $i = 46$ )	$x^{663318454036926509096789670824247807 \cdot 2^{47}}$
	$x^{140737488355329}$	Gold ( $i = 47$ )	$x^{113372084658794485000087375749082426709 \cdot 2^{48}}$
	$x^{562949953421313}$	Gold ( $i = 49$ )	$x^{65861438221022647932003524849057373415 \cdot 2^{65}}$
	$x^{1125899906842625}$	Gold ( $i = 50$ )	$x^{97959448405277833140880113506522457307 \cdot 2^{65}}$
	$x^{4503599627370497}$	Gold ( $i = 52$ )	$x^{68056471355946747439081074634469356339 \cdot 2^{53}}$
	$x^{9007199254740993}$	Gold ( $i = 53$ )	$x^{67924580915294268541091434271579358835 \cdot 2^{56}}$
	$x^{36028797018963969}$	Gold ( $i = 55$ )	$x^{102084645172447014294213585588052407091 \cdot 2^{59}}$
	$x^{72057594037927937}$	Gold ( $i = 56$ )	$x^{101826910570401145114722030868957129883 \cdot 2^{60}}$
	$x^{288230376151711745}$	Gold ( $i = 58$ )	$x^{5234474207305366386008028012872200255 \cdot 2^{59}}$
	$x^{576460752303423489}$	Gold ( $i = 59$ )	$x^{100073270584467492043906855539107786029 \cdot 2^{60}}$
	$x^{2305843009213693953}$	Gold ( $i = 61$ )	$x^{101816771204690248928893057668047359387 \cdot 2^{65}}$
	$x^{4611686018427387905}$	Gold ( $i = 62$ )	$x^{65861103275020347843271964065336512115 \cdot 2^{63}}$
	$x^{18446744073709551617}$	Gold ( $i = 64$ )	$x^{36893488147419103231 \cdot 2^{65}}$
	$x^{13}$	Kasami ( $i = 2$ )	$x^{52351133372452071302057631912579724859 \cdot 2^{121}}$
	$x^{241}$	Kasami ( $i = 4$ )	$x^{70598001435879349266260291998292160087 \cdot 2^{116}}$
	$x^{993}$	Kasami ( $i = 5$ )	$x^{70592313782188643981324440212431270585 \cdot 2^{112}}$
	$x^{16257}$	Kasami ( $i = 7$ )	$x^{97247455047959654379703415521190571373 \cdot 2^{106}}$
	$x^{65281}$	Kasami ( $i = 8$ )	$x^{72632075193032529371465844272522374601 \cdot 2^{91}}$

Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
129	$x^{1047553}$	Kasami ( $i = 10$ )	$x^{113205809574008089704208739261103123285 \cdot 2^{91}}$
	$x^{4192257}$	Kasami ( $i = 11$ )	$x^{48611778298598707125406261294316500553 \cdot 2^{67}}$
	$x^{67100673}$	Kasami ( $i = 13$ )	$x^{72913199333273632525940820910595075657 \cdot 2^{68}}$
	$x^{268419073}$	Kasami ( $i = 14$ )	$x^{56712573976414368169690640091442868679 \cdot 2^{61}}$
	$x^{4294901761}$	Kasami ( $i = 16$ )	$x^{72917093734136765417502766373891961417 \cdot 2^{68}}$
	$x^{17179738113}$	Kasami ( $i = 17$ )	$x^{70887544365272732144691707951863648711 \cdot 2^{58}}$
	$x^{274877382657}$	Kasami ( $i = 19$ )	$x^{70596622526584041529002825318639832407 \cdot 2^{68}}$
	$x^{1099510579201}$	Kasami ( $i = 20$ )	$x^{51941339764844767187050828535543125547 \cdot 2^{67}}$
	$x^{17592181850113}$	Kasami ( $i = 22$ )	$x^{97223533406159266751597500045395942253 \cdot 2^{127}}$
	$x^{70368735789057}$	Kasami ( $i = 23$ )	$x^{70586948911231475871051776347555000889 \cdot 2^{127}}$
	$x^{1125899873288193}$	Kasami ( $i = 25$ )	$x^{9883444275722949725922752773069516205 \cdot 2^{118}}$
	$x^{4503599560261633}$	Kasami ( $i = 26$ )	$x^{113427452259911270917757116962150110549 \cdot 2^1}$
	$x^{72057593769492481}$	Kasami ( $i = 28$ )	$x^{109937420022894564250363145212467565237 \cdot 2^{91}}$
	$x^{288230375614840833}$	Kasami ( $i = 29$ )	$x^{70892736697069758375065198814312559047 \cdot 2^{91}}$
	$x^{4611686016279904257}$	Kasami ( $i = 31$ )	$x^{110100822603624935651188344702161834677 \cdot 2^{94}}$
	$x^{18446744069414584321}$	Kasami ( $i = 32$ )	$x^{72917650057316390833923293371923993161 \cdot 2^{100}}$
	$x^{295147905162172956673}$	Kasami ( $i = 34$ )	$x^{11255493427397722076293588457051998933 \cdot 2^{110}}$
	$x^{1180591620683051565057}$	Kasami ( $i = 35$ )	$x^{49080385953977524449486887115650075099 \cdot 2^{19}}$
	$x^{18889465931341141901313}$	Kasami ( $i = 37$ )	$x^{113427888330067118634196045368348333397 \cdot 2^{112}}$
	$x^{75557863725639445512193}$	Kasami ( $i = 38$ )	$x^{112544792111115110836951203877112621781 \cdot 2^1}$
	$x^{1208925819613529663078401}$	Kasami ( $i = 40$ )	$x^{99497768110479670019420370210055824821 \cdot 2^{37}}$
	$x^{4835703278456317675569153}$	Kasami ( $i = 41$ )	$x^{73291586721432899822880693338380128953 \cdot 2^{127}}$
	$x^{309485009821327476538736641}$	Kasami ( $i = 44$ )	$x^{75618303760208547436305476136920066731 \cdot 2^{127}}$
	$x^{4951760157141450730852319233}$	Kasami ( $i = 46$ )	$x^{72965029944060879105216020474684075465 \cdot 2^{113}}$
	$x^{19807040628565943660897632257}$	Kasami ( $i = 47$ )	$x^{113455141131071989526791521029283556693 \cdot 2^{108}}$
	$x^{316912650057056787424222380033}$	Kasami ( $i = 49$ )	$x^{56639954217358174114232559470421191367 \cdot 2^{23}}$
	$x^{1267650600228228275596796362753}$	Kasami ( $i = 50$ )	$x^{48612531639226896743491656215720474329 \cdot 2^{25}}$
	$x^{20282409603651665920347623915521}$	Kasami ( $i = 52$ )	$x^{51942140146027026787233922398703300923 \cdot 2^{86}}$
	$x^{81129638414606672688589750403073}$	Kasami ( $i = 53$ )	$x^{51941360245707526346088133608949517991 \cdot 2^{85}}$
	$x^{1298074214633706871103827063341057}$	Kasami ( $i = 55$ )	$x^{49079168814497180671937757435559522619 \cdot 2^{116}}$
	$x^{5192296858534827556472902291292161}$	Kasami ( $i = 56$ )	$x^{48660710695583933495956948919291899611 \cdot 2^{55}}$
	$x^{83076749736557241768257565115809793}$	Kasami ( $i = 58$ )	$x^{72637277435767398833233798043855983033 \cdot 2^{107}}$
	$x^{332306998946228967649491012766662657}$	Kasami ( $i = 59$ )	$x^{97414905863432610091023126407223537069 \cdot 2^{108}}$
	$x^{5316911983139663489309385231907684353}$	Kasami ( $i = 61$ )	$x^{49003298524677022115391672028017872603 \cdot 2^{128}}$



Table 26: (continued)

$n$	$F$	$F$ 's Family	$F^{-1}$
129	$x^{21267647932558653961849226946058125313}$	Kasami ( $i = 62$ )	$x^{57303936908161822750800764025244454599} \cdot 2^{124}$
	$x^{340282366920938463444927863358058659841}$	Kasami ( $i = 64$ )	$x^{97223533405982418148204239900827676087} \cdot 2^{65}$
	$x^{18446744073709551619}$	Welch	$x^{39407700580917505879132243566953172751} \cdot 2^{71}$
	$x^{18446744078004518911}$	Niho	$x^{26409387510903693889084500651} \cdot 2^{98}$
	$x^{340282366920938463463374607431768211455}$	Inverse	$x^{340282366920938463463374607431768211455} \cdot 2^2$