

150 次までの円分多項式表

Red cat

平成 22 年 3 月 30 日

n	$\Phi_n(x)$
1	$x - 1$
2	$x + 1$
3	$x^2 + x + 1$
4	$x^2 + 1$
5	$x^4 + x^3 + x^2 + x + 1$
6	$x^2 - x + 1$
7	$x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
8	$x^4 + 1$
9	$x^6 + x^3 + 1$
10	$x^4 - x^3 + x^2 - x + 1$
11	$x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
12	$x^4 - x^2 + 1$
13	$x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
14	$x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
15	$x^8 - x^7 + x^5 - x^4 + x^3 - x + 1$
16	$x^8 + 1$
17	$x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
18	$x^6 - x^3 + 1$
19	$x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
20	$x^8 - x^6 + x^4 - x^2 + 1$
21	$x^{12} - x^{11} + x^9 - x^8 + x^6 - x^4 + x^3 - x + 1$
22	$x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
23	$x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
24	$x^8 - x^4 + 1$

n	$\Phi_n(x)$
25	$x^{20} + x^{15} + x^{10} + x^5 + 1$
26	$x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
27	$x^{18} + x^9 + 1$
28	$x^{12} - x^{10} + x^8 - x^6 + x^4 - x^2 + 1$
29	$x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
30	$x^8 + x^7 - x^5 - x^4 - x^3 + x + 1$
31	$x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
32	$x^{16} + 1$
33	$x^{20} - x^{19} + x^{17} - x^{16} + x^{14} - x^{13} + x^{11} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$
34	$x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
35	$x^{24} - x^{23} + x^{19} - x^{18} + x^{17} - x^{16} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^8 + x^7 - x^6 + x^5 - x + 1$
36	$x^{12} - x^6 + 1$
37	$x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
38	$x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
39	$x^{24} - x^{23} + x^{21} - x^{20} + x^{18} - x^{17} + x^{15} - x^{14} + x^{12} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$
40	$x^{16} - x^{12} + x^8 - x^4 + 1$
41	$x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
42	$x^{12} + x^{11} - x^9 - x^8 + x^6 - x^4 - x^3 + x + 1$
43	$x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
44	$x^{20} - x^{18} + x^{16} - x^{14} + x^{12} - x^{10} + x^8 - x^6 + x^4 - x^2 + 1$
45	$x^{24} - x^{21} + x^{15} - x^{12} + x^9 - x^3 + 1$
46	$x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$

n	$\Phi_n(x)$
47	$x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
48	$x^{16} - x^8 + 1$
49	$x^{42} + x^{35} + x^{28} + x^{21} + x^{14} + x^7 + 1$
50	$x^{20} - x^{15} + x^{10} - x^5 + 1$
51	$x^{32} - x^{31} + x^{29} - x^{28} + x^{26} - x^{25} + x^{23} - x^{22} + x^{20} - x^{19} + x^{17} - x^{16} + x^{15} - x^{13} + x^{12} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$
52	$x^{24} - x^{22} + x^{20} - x^{18} + x^{16} - x^{14} + x^{12} - x^{10} + x^8 - x^6 + x^4 - x^2 + 1$
53	$x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
54	$x^{18} - x^9 + 1$
55	$x^{40} - x^{39} + x^{35} - x^{34} + x^{30} - x^{28} + x^{25} - x^{23} + x^{20} - x^{17} + x^{15} - x^{12} + x^{10} - x^6 + x^5 - x + 1$
56	$x^{24} - x^{20} + x^{16} - x^{12} + x^8 - x^4 + 1$
57	$x^{36} - x^{35} + x^{33} - x^{32} + x^{30} - x^{29} + x^{27} - x^{26} + x^{24} - x^{23} + x^{21} - x^{10} + x^{18} - x^{16} + x^{15} - x^{13} + x^{12} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$
58	$x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
59	$x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
60	$x^{16} + x^{14} - x^{10} - x^8 - x^6 + x^2 + 1$
61	$x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
62	$x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
63	$x^{36} - x^{33} + x^{27} - x^{24} + x^{18} - x^{12} + x^9 - x^3 + 1$

n	$\Phi_n(x)$
64	$x^{32} + 1$
65	$x^{48} - x^{47} + x^{43} - x^{42} + x^{38} - x^{37} + x^{35} - x^{34} + x^{33} - x^{32} + x^{30} - x^{29} + x^{28} - x^{27} + x^{25} - x^{24} + x^{23} - x^{21} + x^{20} - x^{19} + x^{18} - x^{16} + x^{15} - x^{14} + x^{13} - x^{11} + x^{10} - x^6 + x^5 - x + 1$
66	$x^{20} + x^{19} - x^{17} - x^{16} + x^{14} + x^{13} - x^{11} - x^{10} - x^9 + x^7 + x^6 - x^4 - x^3 + x + 1$
67	$x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
68	$x^{32} - x^{30} + x^{28} - x^{26} + x^{24} - x^{22} + x^{20} - x^{18} + x^{16} - x^{14} + x^{12} - x^{10} + x^8 - x^6 + x^4 - x^2 + 1$
69	$x^{44} - x^{43} + x^{41} - x^{40} + x^{38} - x^{37} + x^{35} - x^{34} + x^{32} - x^{31} + x^{29} - x^{28} + x^{26} - x^{25} + x^{23} - x^{22} + x^{21} - x^{19} + x^{18} - x^{16} + x^{15} - x^{13} + x^{12} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$
70	$x^{24} + x^{23} - x^{19} - x^{18} - x^{17} - x^{16} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} - x^8 - x^7 - x^6 - x^5 + x + 1$
71	$x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
72	$x^{24} - x^{12} + 1$
73	$x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
74	$x^{36} - x^{35} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
75	$x^{40} - x^{35} + x^{25} - x^{20} + x^{15} - x^5 + 1$
76	$x^{36} - x^{34} + x^{32} - x^{30} + x^{28} - x^{26} + x^{24} - x^{22} + x^{20} - x^{18} + x^{16} - x^{14} + x^{12} - x^{10} + x^8 - x^6 + x^4 - x^2 + 1$

n	$\Phi_n(x)$
77	$x^{60} - x^{59} + x^{53} - x^{52} + x^{49} - x^{48} + x^{46} - x^{45} + x^{42} - x^{41} + x^{39} - x^{37} + x^{35} - x^{34} + x^{32} - x^{30} + x^{28} - x^{26} + x^{25} - x^{23} + x^{21} - x^{19} + x^{18} - x^{15} + x^{14} - x^{12} + x^{11} - x^8 + x^7 - x + 1$
78	$x^{24} + x^{23} - x^{21} - x^{20} + x^{18} + x^{17} - x^{15} - x^{14} + x^{12} - x^{10} - x^9 + x^7 + x^6 - x^4 - x^3 + x + 1$
79	$x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
80	$x^{32} - x^{24} + x^{16} - x^8 + 1$
81	$x^{54} + x^{27} + 1$
82	$x^{40} - x^{39} + x^{38} - x^{37} + x^{36} - x^{35} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
83	$x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
84	$x^{24} + x^{22} - x^{18} - x^{16} + x^{12} - x^8 - x^6 + x^2 + 1$
85	$x^{64} - x^{63} + x^{59} - x^{58} + x^{54} - x^{53} + x^{49} - x^{48} + x^{47} - x^{46} + x^{44} - x^{43} + x^{42} - x^{41} + x^{39} - x^{38} + x^{37} - x^{36} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{28} + x^{27} - x^{26} + x^{25} - x^{23} + x^{22} - x^{21} + x^{20} - x^{18} + x^{17} - x^{16} + x^{15} - x^{11} + x^{10} - x^6 + x^5 - x + 1$
86	$x^{42} - x^{41} + x^{40} - x^{39} + x^{38} - x^{37} + x^{36} - x^{35} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
87	$x^{56} - x^{55} + x^{53} - x^{52} + x^{50} - x^{49} + x^{47} - x^{46} + x^{44} - x^{43} + x^{41} - x^{40} + x^{38} - x^{37} + x^{35} - x^{34} + x^{32} - x^{31} + x^{29} - x^{28} + x^{27} - x^{25} + x^{24} - x^{22} + x^{21} - x^{19} + x^{18} - x^{16} + x^{15} - x^{13} + x^{12} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$
88	$x^{40} - x^{36} + x^{32} - x^{28} + x^{24} - x^{20} + x^{16} - x^{12} + x^8 - x^4 + 1$

n	$\Phi_n(x)$
89	$x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
90	$x^{24} + x^{21} - x^{15} - x^{12} - x^9 + x^3 + 1$
91	$x^{72} - x^{71} + x^{65} - x^{64} + x^{59} - x^{57} + x^{52} - x^{50} + x^{46} - x^{43} + x^{39} - x^{36} + x^{33} - x^{29} + x^{26} - x^{22} + x^{20} - x^{15} + x^{13} - x^8 + x^7 - x + 1$
92	$x^{44} - x^{42} + x^{40} - x^{38} + x^{36} - x^{34} + x^{32} - x^{30} + x^{28} - x^{26} + x^{24} - x^{22} + x^{20} - x^{18} + x^{16} - x^{14} + x^{12} - x^{10} + x^8 - x^6 + x^4 - x^2 + 1$
93	$x^{60} - x^{59} + x^{57} - x^{56} + x^{54} - x^{53} + x^{51} - x^{50} + x^{48} - x^{47} + x^{45} - x^{44} + x^{42} - x^{41} + x^{39} - x^{38} + x^{36} - x^{35} + x^{33} - x^{32} + x^{30} - x^{28} + x^{27} - x^{25} + x^{24} - x^{22} + x^{21} - x^{19} + x^{18} - x^{16} + x^{15} - x^{13} + x^{12} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$
94	$x^{46} - x^{45} + x^{44} - x^{43} + x^{42} - x^{41} + x^{40} - x^{39} + x^{38} - x^{37} + x^{36} - x^{35} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
95	$x^{72} - x^{71} + x^{67} - x^{66} + x^{62} - x^{61} + x^{57} - x^{56} + x^{53} - x^{51} + x^{48} - x^{46} + x^{43} - x^{41} + x^{38} - x^{36} + x^{34} - x^{31} + x^{29} - x^{26} + x^{24} - x^{21} + x^{19} - x^{16} + x^{15} - x^{11} + x^{10} - x^6 + x^5 - x + 1$
96	$x^{32} - x^{16} + 1$
97	$x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
98	$x^{42} - x^{35} + x^{28} - x^{21} + x^{14} - x^7 + 1$
99	$x^{60} - x^{57} + x^{51} - x^{48} + x^{42} - x^{39} + x^{33} - x^{30} + x^{27} - x^{21} + x^{18} - x^{12} + x^9 - x^3 + 1$
100	$x^{40} - x^{30} + x^{20} - x^{10} + 1$

n	$\Phi_n(x)$
101	$x^{100} + x^{99} + x^{98} + x^{97} + x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
102	$x^{32} + x^{31} - x^{29} - x^{28} + x^{26} + x^{25} - x^{23} - x^{22} + x^{20} + x^{19} - x^{17} - x^{16} - x^{15} + x^{13} + x^{12} - x^{10} - x^9 + x^7 + x^6 - x^4 - x^3 + x + 1$
103	$x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{97} + x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
104	$x^{48} - x^{44} + x^{40} - x^{36} + x^{32} - x^{28} + x^{24} - x^{20} + x^{16} - x^{12} + x^8 - x^4 + 1$
105	$x^{48} + x^{47} + x^{46} - x^{43} - x^{42} - 2x^{41} - x^{40} - x^{39} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} - x^{28} - x^{26} - x^{24} - x^{22} - x^{20} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} - x^9 - x^8 - 2x^7 - x^6 - x^5 + x^2 + x + 1$
106	$x^{52} - x^{51} + x^{50} - x^{49} + x^{48} - x^{47} + x^{46} - x^{45} + x^{44} - x^{43} + x^{42} - x^{41} + x^{40} - x^{39} + x^{38} - x^{37} + x^{36} - x^{35} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
107	$x^{106} + x^{105} + x^{104} + x^{103} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{97} + x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
108	$x^{36} - x^{18} + 1$

n	$\Phi_n(x)$
109	$x^{108} + x^{107} + x^{106} + x^{105} + x^{104} + x^{103} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{97} + x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
110	$x^{40} + x^{39} - x^{35} - x^{34} + x^{30} - x^{28} - x^{25} + x^{23} + x^{20} + x^{17} - x^{15} - x^{12} + x^{10} - x^6 - x^5 + x + 1$
111	$x^{72} - x^{71} + x^{69} - x^{68} + x^{66} - x^{65} + x^{63} - x^{62} + x^{60} - x^{59} + x^{57} - x^{56} + x^{54} - x^{53} + x^{51} - x^{50} + x^{48} - x^{47} + x^{45} - x^{44} + x^{42} - x^{41} + x^{39} - x^{38} + x^{36} - x^{34} + x^{33} - x^{31} + x^{30} - x^{28} + x^{27} - x^{25} + x^{24} - x^{22} + x^{21} - x^{19} + x^{18} - x^{16} + x^{15} - x^{13} + x^{12} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$
112	$x^{48} - x^{40} + x^{32} - x^{24} + x^{16} - x^8 + 1$
113	$x^{112} + x^{111} + x^{110} + x^{109} + x^{108} + x^{107} + x^{106} + x^{105} + x^{104} + x^{103} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{97} + x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
114	$x^{36} + x^{35} - x^{33} - x^{32} + x^{30} + x^{29} - x^{27} - x^{26} + x^{24} + x^{23} - x^{21} - x^{20} + x^{18} - x^{16} - x^{15} + x^{13} + x^{12} - x^{10} - x^9 + x^7 + x^6 - x^4 - x^3 + x + 1$
115	$x^{88} - x^{87} + x^{83} - x^{82} + x^{78} - x^{77} + x^{73} - x^{72} + x^{68} - x^{67} + x^{65} - x^{64} + x^{63} - x^{62} + x^{60} - x^{59} + x^{58} - x^{57} + x^{55} - x^{54} + x^{53} - x^{52} + x^{50} - x^{49} + x^{48} - x^{47} + x^{45} - x^{44} + x^{43} - x^{41} + x^{40} - x^{39} + x^{38} - x^{36} + x^{35} - x^{34} + x^{33} - x^{31} + x^{30} - x^{29} + x^{28} - x^{26} + x^{25} - x^{24} + x^{23} - x^{21} + x^{20} - x^{16} + x^{15} - x^{11} + x^{10} - x^6 + x^5 - x + 1$
116	$x^{56} - x^{54} + x^{52} - x^{50} + x^{48} - x^{46} + x^{44} - x^{42} + x^{40} - x^{38} + x^{36} - x^{34} + x^{32} - x^{30} + x^{28} - x^{26} + x^{24} - x^{22} + x^{20} - x^{18} + x^{16} - x^{14} + x^{12} - x^{10} + x^8 - x^6 + x^4 - x^2 + 1$
117	$x^{72} - x^{69} + x^{63} - x^{60} + x^{54} - x^{51} + x^{45} - x^{42} + x^{36} - x^{30} + x^{27} - x^{21} + x^{18} - x^{12} + x^9 - x^3 + 1$

n	$\Phi_n(x)$
118	$x^{58} - x^{57} + x^{56} - x^{55} + x^{54} - x^{53} + x^{52} - x^{51} + x^{50} - x^{49} + x^{48} - x^{47} + x^{46} - x^{45} + x^{44} - x^{43} + x^{42} - x^{41} + x^{40} - x^{39} + x^{38} - x^{37} + x^{36} - x^{35} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
119	$x^{96} - x^{95} + x^{89} - x^{88} + x^{82} - x^{81} + x^{79} - x^{78} + x^{75} - x^{74} + x^{72} - x^{71} + x^{68} - x^{67} + x^{65} - x^{64} + x^{62} - x^{60} + x^{58} - x^{57} + x^{55} - x^{53} + x^{51} - x^{50} + x^{48} - x^{46} + x^{45} - x^{43} + x^{41} - x^{39} + x^{38} - x^{36} + x^{34} - x^{32} + x^{31} - x^{29} + x^{28} - x^{25} + x^{24} - x^{22} + x^{21} - x^{18} + x^{17} - x^{15} + x^{14} - x^8 + x^7 - x + 1$
120	$x^{32} + x^{28} - x^{20} - x^{16} - x^{12} + x^4 + 1$
121	$x^{110} + x^{99} + x^{88} + x^{77} + x^{66} + x^{55} + x^{44} + x^{33} + x^{22} + x^{11} + 1$
122	$x^{60} - x^{59} + x^{58} - x^{57} + x^{56} - x^{55} + x^{54} - x^{53} + x^{52} - x^{51} + x^{50} - x^{49} + x^{48} - x^{47} + x^{46} - x^{45} + x^{44} - x^{43} + x^{42} - x^{41} + x^{40} - x^{39} + x^{38} - x^{37} + x^{36} - x^{35} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
123	$x^{80} - x^{79} + x^{77} - x^{76} + x^{74} - x^{73} + x^{71} - x^{70} + x^{68} - x^{67} + x^{65} - x^{64} + x^{62} - x^{61} + x^{59} - x^{58} + x^{56} - x^{55} + x^{53} - x^{52} + x^{50} - x^{49} + x^{47} - x^{46} + x^{44} - x^{43} + x^{41} - x^{40} + x^{39} - x^{37} + x^{36} - x^{34} + x^{33} - x^{31} + x^{30} - x^{28} + x^{27} - x^{25} + x^{24} - x^{22} + x^{21} - x^{19} + x^{18} - x^{16} + x^{15} - x^{13} + x^{12} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$
124	$x^{60} - x^{58} + x^{56} - x^{54} + x^{52} - x^{50} + x^{48} - x^{46} + x^{44} - x^{42} + x^{40} - x^{38} + x^{36} - x^{34} + x^{32} - x^{30} + x^{28} - x^{26} + x^{24} - x^{22} + x^{20} - x^{18} + x^{16} - x^{14} + x^{12} - x^{10} + x^8 - x^6 + x^4 - x^2 + 1$
125	$x^{100} + x^{75} + x^{50} + x^{25} + 1$
126	$x^{36} + x^{33} - x^{27} - x^{24} + x^{18} - x^{12} - x^9 + x^3 + 1$
127	$x^{126} + x^{125} + x^{124} + x^{123} + x^{122} + x^{121} + x^{120} + x^{119} + x^{118} + x^{117} + x^{116} + x^{115} + x^{114} + x^{113} + x^{112} + x^{111} + x^{110} + x^{109} + x^{108} + x^{107} + x^{106} + x^{105} + x^{104} + x^{103} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{97} + x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
128	$x^{64} + 1$

n	$\Phi_n(x)$
129	$x^{84} - x^{83} + x^{81} - x^{80} + x^{78} - x^{77} + x^{75} - x^{74} + x^{72} - x^{71} + x^{69} - x^{68} + x^{66} - x^{65} + x^{63} - x^{62} + x^{60} - x^{59} + x^{57} - x^{56} + x^{54} - x^{53} + x^{51} - x^{50} + x^{48} - x^{47} + x^{45} - x^{44} + x^{42} - x^{40} + x^{39} - x^{37} + x^{36} - x^{34} + x^{33} - x^{31} + x^{30} - x^{28} + x^{27} - x^{25} + x^{24} - x^{22} + x^{21} - x^{19} + x^{18} - x^{16} + x^{15} - x^{13} + x^{12} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$
130	$x^{48} + x^{47} - x^{43} - x^{42} + x^{38} + x^{37} - x^{35} - x^{34} - x^{33} - x^{32} + x^{30} + x^{29} + x^{28} + x^{27} - x^{25} - x^{24} - x^{23} + x^{21} + x^{20} + x^{19} + x^{18} - x^{16} - x^{15} - x^{14} - x^{13} + x^{11} + x^{10} - x^6 - x^5 + x + 1$
131	$x^{130} + x^{129} + x^{128} + x^{127} + x^{126} + x^{125} + x^{124} + x^{123} + x^{122} + x^{121} + x^{120} + x^{119} + x^{118} + x^{117} + x^{116} + x^{115} + x^{114} + x^{113} + x^{112} + x^{111} + x^{110} + x^{109} + x^{108} + x^{107} + x^{106} + x^{105} + x^{104} + x^{103} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{97} + x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
132	$x^{40} + x^{38} - x^{34} - x^{32} + x^{28} + x^{26} - x^{22} - x^{20} - x^{18} + x^{14} + x^{12} - x^8 - x^6 + x^2 + 1$
133	$x^{108} - x^{107} + x^{101} - x^{100} + x^{94} - x^{93} + x^{89} - x^{88} + x^{87} - x^{86} + x^{82} - x^{81} + x^{80} - x^{79} + x^{75} - x^{74} + x^{73} - x^{72} + x^{70} - x^{69} + x^{68} - x^{67} + x^{66} - x^{65} + x^{63} - x^{62} + x^{61} - x^{60} + x^{59} - x^{58} + x^{56} - x^{55} + x^{54} - x^{53} + x^{52} - x^{50} + x^{49} - x^{48} + x^{47} - x^{46} + x^{45} - x^{43} + x^{42} - x^{41} + x^{40} - x^{39} + x^{38} - x^{36} + x^{35} - x^{34} + x^{33} - x^{29} + x^{28} - x^{27} + x^{26} - x^{22} + x^{21} - x^{20} + x^{19} - x^{15} + x^{14} - x^8 + x^7 - x + 1$
134	$x^{66} - x^{65} + x^{64} - x^{63} + x^{62} - x^{61} + x^{60} - x^{59} + x^{58} - x^{57} + x^{56} - x^{55} + x^{54} - x^{53} + x^{52} - x^{51} + x^{50} - x^{49} + x^{48} - x^{47} + x^{46} - x^{45} + x^{44} - x^{43} + x^{42} - x^{41} + x^{40} - x^{39} + x^{38} - x^{37} + x^{36} - x^{35} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
135	$x^{72} - x^{63} + x^{45} - x^{36} + x^{27} - x^9 + 1$
136	$x^{64} - x^{60} + x^{56} - x^{52} + x^{48} - x^{44} + x^{40} - x^{36} + x^{32} - x^{28} + x^{24} - x^{20} + x^{16} - x^{12} + x^8 - x^4 + 1$

n	$\Phi_n(x)$
137	$x^{136} + x^{135} + x^{134} + x^{133} + x^{132} + x^{131} + x^{130} + x^{129} + x^{128} + x^{127} + x^{126} + x^{125} + x^{124} + x^{123} + x^{122} + x^{121} + x^{120} + x^{119} + x^{118} + x^{117} + x^{116} + x^{115} + x^{114} + x^{113} + x^{112} + x^{111} + x^{110} + x^{109} + x^{108} + x^{107} + x^{106} + x^{105} + x^{104} + x^{103} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{97} + x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
138	$x^{44} + x^{43} - x^{41} - x^{40} + x^{38} + x^{37} - x^{35} - x^{34} + x^{32} + x^{31} - x^{29} - x^{28} + x^{26} + x^{25} - x^{23} - x^{22} - x^{21} + x^{19} + x^{18} - x^{16} - x^{15} + x^{13} + x^{12} - x^{10} - x^9 + x^7 + x^6 - x^4 - x^3 + x + 1$
139	$x^{138} + x^{137} + x^{136} + x^{135} + x^{134} + x^{133} + x^{132} + x^{131} + x^{130} + x^{129} + x^{128} + x^{127} + x^{126} + x^{125} + x^{124} + x^{123} + x^{122} + x^{121} + x^{120} + x^{119} + x^{118} + x^{117} + x^{116} + x^{115} + x^{114} + x^{113} + x^{112} + x^{111} + x^{110} + x^{109} + x^{108} + x^{107} + x^{106} + x^{105} + x^{104} + x^{103} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{97} + x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
140	$x^{48} + x^{46} - x^{38} - x^{36} - x^{34} - x^{32} + x^{28} + x^{26} + x^{24} + x^{22} + x^{20} - x^{16} - x^{14} - x^{12} - x^{10} + x^2 + 1$
141	$x^{92} - x^{91} + x^{89} - x^{88} + x^{86} - x^{85} + x^{83} - x^{82} + x^{80} - x^{79} + x^{77} - x^{76} + x^{74} - x^{73} + x^{71} - x^{70} + x^{68} - x^{67} + x^{65} - x^{64} + x^{62} - x^{61} + x^{59} - x^{58} + x^{56} - x^{55} + x^{53} - x^{52} + x^{50} - x^{49} + x^{47} - x^{46} + x^{45} - x^{43} + x^{42} - x^{40} + x^{39} - x^{37} + x^{36} - x^{34} + x^{33} - x^{31} + x^{30} - x^{28} + x^{27} - x^{25} + x^{24} - x^{22} + x^{21} - x^{19} + x^{18} - x^{16} + x^{15} - x^{13} + x^{12} - x^{10} + x^9 - x^7 + x^6 - x^4 + x^3 - x + 1$

n	$\Phi_n(x)$
142	$x^{70} - x^{69} + x^{68} - x^{67} + x^{66} - x^{65} + x^{64} - x^{63} + x^{62} - x^{61} + x^{60} - x^{59} + x^{58} - x^{57} + x^{56} - x^{55} + x^{54} - x^{53} + x^{52} - x^{51} + x^{50} - x^{49} + x^{48} - x^{47} + x^{46} - x^{45} + x^{44} - x^{43} + x^{42} - x^{41} + x^{40} - x^{39} + x^{38} - x^{37} + x^{36} - x^{35} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
143	$x^{120} - x^{119} + x^{109} - x^{108} + x^{107} - x^{106} + x^{98} - x^{97} + x^{96} - x^{95} + x^{94} - x^{93} + x^{87} - x^{86} + x^{85} - x^{84} + x^{83} - x^{82} + x^{81} - x^{80} + x^{76} - x^{75} + x^{74} - x^{73} + x^{72} - x^{71} + x^{70} - x^{69} + x^{68} - x^{67} + x^{65} - x^{64} + x^{63} - x^{62} + x^{61} - x^{60} + x^{59} - x^{58} + x^{57} - x^{56} + x^{55} - x^{53} + x^{52} - x^{51} + x^{50} - x^{49} + x^{48} - x^{47} + x^{46} - x^{45} + x^{44} - x^{40} + x^{39} - x^{38} + x^{37} - x^{36} + x^{35} - x^{34} + x^{33} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{14} + x^{13} - x^{12} + x^{11} - x + 1$
144	$x^{48} - x^{24} + 1$
145	$x^{112} - x^{111} + x^{107} - x^{106} + x^{102} - x^{101} + x^{97} - x^{96} + x^{92} - x^{91} + x^{87} - x^{86} + x^{83} - x^{81} + x^{78} - x^{76} + x^{73} - x^{71} + x^{68} - x^{66} + x^{63} - x^{61} + x^{58} - x^{56} + x^{54} - x^{51} + x^{49} - x^{46} + x^{44} - x^{41} + x^{39} - x^{36} + x^{34} - x^{31} + x^{29} - x^{26} + x^{25} - x^{21} + x^{20} - x^{16} + x^{15} - x^{11} + x^{10} - x^6 + x^5 - x + 1$
146	$x^{72} - x^{71} + x^{70} - x^{69} + x^{68} - x^{67} + x^{66} - x^{65} + x^{64} - x^{63} + x^{62} - x^{61} + x^{60} - x^{59} + x^{58} - x^{57} + x^{56} - x^{55} + x^{54} - x^{53} + x^{52} - x^{51} + x^{50} - x^{49} + x^{48} - x^{47} + x^{46} - x^{45} + x^{44} - x^{43} + x^{42} - x^{41} + x^{40} - x^{39} + x^{38} - x^{37} + x^{36} - x^{35} + x^{34} - x^{33} + x^{32} - x^{31} + x^{30} - x^{29} + x^{28} - x^{27} + x^{26} - x^{25} + x^{24} - x^{23} + x^{22} - x^{21} + x^{20} - x^{19} + x^{18} - x^{17} + x^{16} - x^{15} + x^{14} - x^{13} + x^{12} - x^{11} + x^{10} - x^9 + x^8 - x^7 + x^6 - x^5 + x^4 - x^3 + x^2 - x + 1$
147	$x^{84} - x^{77} + x^{63} - x^{56} + x^{42} - x^{28} + x^{21} - x^7 + 1$
148	$x^{72} - x^{70} + x^{68} - x^{66} + x^{64} - x^{62} + x^{60} - x^{58} + x^{56} - x^{54} + x^{52} - x^{50} + x^{48} - x^{46} + x^{44} - x^{42} + x^{40} - x^{38} + x^{36} - x^{34} + x^{32} - x^{30} + x^{28} - x^{26} + x^{24} - x^{22} + x^{20} - x^{18} + x^{16} - x^{14} + x^{12} - x^{10} + x^8 - x^6 + x^4 - x^2 + 1$

n	$\Phi_n(x)$
149	$x^{148} + x^{147} + x^{146} + x^{145} + x^{144} + x^{143} + x^{142} + x^{141} + x^{140} + x^{139} + x^{138} + x^{137} + x^{136} + x^{135} + x^{134} + x^{133} + x^{132} + x^{131} + x^{130} + x^{129} + x^{128} + x^{127} + x^{126} + x^{125} + x^{124} + x^{123} + x^{122} + x^{121} + x^{120} + x^{119} + x^{118} + x^{117} + x^{116} + x^{115} + x^{114} + x^{113} + x^{112} + x^{111} + x^{110} + x^{109} + x^{108} + x^{107} + x^{106} + x^{105} + x^{104} + x^{103} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{97} + x^{96} + x^{95} + x^{94} + x^{93} + x^{92} + x^{91} + x^{90} + x^{89} + x^{88} + x^{87} + x^{86} + x^{85} + x^{84} + x^{83} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} + x^{77} + x^{76} + x^{75} + x^{74} + x^{73} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{64} + x^{63} + x^{62} + x^{61} + x^{60} + x^{59} + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33} + x^{32} + x^{31} + x^{30} + x^{29} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{23} + x^{22} + x^{21} + x^{20} + x^{19} + x^{18} + x^{17} + x^{16} + x^{15} + x^{14} + x^{13} + x^{12} + x^{11} + x^{10} + x^9 + x^8 + x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$
150	$x^{40} + x^{35} - x^{25} - x^{20} - x^{15} + x^5 + 1$