

*fam7	*fam11	*fam13	*fam17	*fam19	*fam23	*fam29
7 and +30	29 and +30	13 and + 30	17 and + 30	1 and + 30	23 and + 30	11 and + 30
L1 and +7	L10 and + 11	L5 and + 13	L9 and + 17	L0 and +19	L17 and + 23	L10 and + 29

ps	start	sq root	level	*fam1 by 1	*fam7 by 7	*fam11 by 11	*fam13 by 13	*fam17 by 17	*fam19 by 19	*fam23 by 23	*fam29 by 29	Factor
19	19	3	0	19	2.71	1.73	1.46	1.12	1.00	0.83	0.66	TRUE
49	19	7	1	49	7.00	4.45	3.77	2.88	2.58	2.13	1.69	TRUE
79	19	9	2	79	11.29	7.18	6.08	4.65	4.16	3.43	2.72	FALSE
109	19	10	3	109	15.57	9.91	8.38	6.41	5.74	4.74	3.76	FALSE
139	19	12	4	139	19.86	12.64	10.69	8.18	7.32	6.04	4.79	FALSE
169	19	13	5	169	24.14	15.36	13.00	9.94	8.89	7.35	5.83	TRUE
199	19	14	6	199	28.43	18.09	15.31	11.71	10.47	8.65	6.86	FALSE
229	19	15	7	229	32.71	20.82	17.62	13.47	12.05	9.96	7.90	FALSE
259	19	16	8	259	37.00	23.55	19.92	15.24	13.63	11.26	8.93	TRUE
289	19	17	9	289	41.29	26.27	22.23	17.00	15.21	12.57	9.97	TRUE
319	19	18	10	319	45.57	29.00	24.54	18.76	16.79	13.87	11.00	TRUE
349	19	19	11	349	49.86	31.73	26.85	20.53	18.37	15.17	12.03	FALSE
379	19	20	12	379	54.14	34.45	29.15	22.29	19.95	16.48	13.07	FALSE
409	19	20	13	409	58.43	37.18	31.46	24.06	21.53	17.78	14.10	FALSE
439	19	21	14	439	62.71	39.91	33.77	25.82	23.11	19.09	15.14	FALSE
469	19	22	15	469	67.00	42.64	36.08	27.59	24.68	20.39	16.17	TRUE
499	19	23	16	499	71.29	45.36	38.38	29.35	26.26	21.70	17.21	FALSE
529	19	23	17	529	75.57	48.09	40.69	31.12	27.84	23.00	18.24	TRUE
559	19	24	18	559	79.86	50.82	43.00	32.88	29.42	24.30	19.28	TRUE
589	19	25	19	589	84.14	53.55	45.31	34.65	31.00	25.61	20.31	TRUE
619	19	25	20	619	88.43	56.27	47.62	36.41	32.58	26.91	21.34	FALSE
649	19	26	21	649	92.71	59.00	49.92	38.18	34.16	28.22	22.38	TRUE
679	19	26	22	679	97.00	61.73	52.23	39.94	35.74	29.52	23.41	TRUE
709	19	27	23	709	101.29	64.45	54.54	41.71	37.32	30.83	24.45	FALSE
739	19	27	24	739	105.57	67.18	56.85	43.47	38.89	32.13	25.48	FALSE
769	19	28	25	769	109.86	69.91	59.15	45.24	40.47	33.43	26.52	FALSE
799	19	29	26	799	114.14	72.64	61.46	47.00	42.05	34.74	27.55	TRUE
829	19	29	27	829	118.43	75.36	63.77	48.76	43.63	36.04	28.59	FALSE
859	19	30	28	859	122.71	78.09	66.08	50.53	45.21	37.35	29.62	FALSE
889	19	30	29	889	127.00	80.82	68.38	52.29	46.79	38.65	30.66	TRUE
919	19	31	30	919	131.29	83.55	70.69	54.06	48.37	39.96	31.69	FALSE
949	19	31	31	949	135.57	86.27	73.00	55.82	49.95	41.26	32.72	TRUE
979	19	32	32	979	139.86	89.00	75.31	57.59	51.53	42.57	33.76	TRUE
1009	19	32	33	1009	144.14	91.73	77.62	59.35	53.11	43.87	34.79	FALSE

<b>*fam7</b>	<b>*fam11</b>	<b>*fam13</b>	<b>*fam17</b>	<b>*fam19</b>	<b>*fam23</b>	<b>*fam29</b>
<b>7 and +30</b>	<b>29 and +30</b>	<b>13 and + 30</b>	<b>17 and + 30</b>	<b>1 and + 30</b>	<b>23 and + 30</b>	<b>11 and + 30</b>
<b>L1 and +7</b>	<b>L10 and + 11</b>	<b>L5 and + 13</b>	<b>L9 and + 17</b>	<b>L0 and +19</b>	<b>L17 and + 23</b>	<b>L10 and + 29</b>

<b>ps</b>	<b>start</b>	<b>sq root</b>	<b>level</b>	<b>*fam1 by 1</b>	<b>*fam7 by 7</b>	<b>*fam11 by 11</b>	<b>*fam13 by 13</b>	<b>*fam17 by 17</b>	<b>*fam19 by 19</b>	<b>*fam23 by 23</b>	<b>*fam29 by 29</b>	<b>Factor</b>
1039	19	33	34	1039	148.43	94.45	79.92	61.12	54.68	45.17	35.83	FALSE
1069	19	33	35	1069	152.71	97.18	82.23	62.88	56.26	46.48	36.86	FALSE
1099	19	33	36	1099	157.00	99.91	84.54	64.65	57.84	47.78	37.90	TRUE
1129	19	34	37	1129	161.29	102.64	86.85	66.41	59.42	49.09	38.93	FALSE
1159	19	34	38	1159	165.57	105.36	89.15	68.18	61.00	50.39	39.97	TRUE
1189	19	35	39	1189	169.86	108.09	91.46	69.94	62.58	51.70	41.00	TRUE
1219	19	35	40	1219	174.14	110.82	93.77	71.71	64.16	53.00	42.03	TRUE
1249	19	36	41	1249	178.43	113.55	96.08	73.47	65.74	54.30	43.07	FALSE
1279	19	36	42	1279	182.71	116.27	98.38	75.24	67.32	55.61	44.10	FALSE
1309	19	37	43	1309	187.00	119.00	100.69	77.00	68.89	56.91	45.14	TRUE
1339	19	37	44	1339	191.29	121.73	103.00	78.76	70.47	58.22	46.17	TRUE
1369	19	37	45	1369	195.57	124.45	105.31	80.53	72.05	59.52	47.21	FALSE
1399	19	38	46	1399	199.86	127.18	107.62	82.29	73.63	60.83	48.24	FALSE
1429	19	38	47	1429	204.14	129.91	109.92	84.06	75.21	62.13	49.28	FALSE
1459	19	39	48	1459	208.43	132.64	112.23	85.82	76.79	63.43	50.31	FALSE
1489	19	39	49	1489	212.71	135.36	114.54	87.59	78.37	64.74	51.34	FALSE
1519	19	39	50	1519	217.00	138.09	116.85	89.35	79.95	66.04	52.38	TRUE
1549	19	40	51	1549	221.29	140.82	119.15	91.12	81.53	67.35	53.41	FALSE
1579	19	40	52	1579	225.57	143.55	121.46	92.88	83.11	68.65	54.45	FALSE
1609	19	40	53	1609	229.86	146.27	123.77	94.65	84.68	69.96	55.48	FALSE
1639	19	41	54	1639	234.14	149.00	126.08	96.41	86.26	71.26	56.52	TRUE
1669	19	41	55	1669	238.43	151.73	128.38	98.18	87.84	72.57	57.55	FALSE
1699	19	42	56	1699	242.71	154.45	130.69	99.94	89.42	73.87	58.59	FALSE
1729	19	42	57	1729	247.00	157.18	133.00	101.71	91.00	75.17	59.62	TRUE
1759	19	42	58	1759	251.29	159.91	135.31	103.47	92.58	76.48	60.66	FALSE
1789	19	43	59	1789	255.57	162.64	137.62	105.24	94.16	77.78	61.69	FALSE
1819	19	43	60	1819	259.86	165.36	139.92	107.00	95.74	79.09	62.72	TRUE
1849	19	43	61	1849	264.14	168.09	142.23	108.76	97.32	80.39	63.76	FALSE
1879	19	44	62	1879	268.43	170.82	144.54	110.53	98.89	81.70	64.79	FALSE
1909	19	44	63	1909	272.71	173.55	146.85	112.29	100.47	83.00	65.83	TRUE
1939	19	44	64	1939	277.00	176.27	149.15	114.06	102.05	84.30	66.86	TRUE
1969	19	45	65	1969	281.29	179.00	151.46	115.82	103.63	85.61	67.90	TRUE
1999	19	45	66	1999	285.57	181.73	153.77	117.59	105.21	86.91	68.93	FALSE
2029	19	45	67	2029	289.86	184.45	156.08	119.35	106.79	88.22	69.97	FALSE

<b>*fam7</b>	<b>*fam11</b>	<b>*fam13</b>	<b>*fam17</b>	<b>*fam19</b>	<b>*fam23</b>	<b>*fam29</b>
<b>7 and +30</b>	<b>29 and +30</b>	<b>13 and + 30</b>	<b>17 and + 30</b>	<b>1 and + 30</b>	<b>23 and + 30</b>	<b>11 and + 30</b>
<b>L1 and +7</b>	<b>L10 and + 11</b>	<b>L5 and + 13</b>	<b>L9 and + 17</b>	<b>L0 and +19</b>	<b>L17 and + 23</b>	<b>L10 and + 29</b>

ps	start	sq root	level 19	*fam1	*fam7	*fam11	*fam13	*fam17	*fam19	*fam23	*fam29	Factor
				by 1	by 7	by 11	by 13	by 17	by 19	by 23	by 29	
2059	19	46	68	2059	294.14	187.18	158.38	121.12	108.37	89.52	71.00	TRUE
2089	19	46	69	2089	298.43	189.91	160.69	122.88	109.95	90.83	72.03	FALSE
2119	19	46	70	2119	302.71	192.64	163.00	124.65	111.53	92.13	73.07	TRUE
2149	19	47	71	2149	307.00	195.36	165.31	126.41	113.11	93.43	74.10	TRUE
2179	19	47	72	2179	311.29	198.09	167.62	128.18	114.68	94.74	75.14	FALSE
2209	19	47	73	2209	315.57	200.82	169.92	129.94	116.26	96.04	76.17	FALSE
2239	19	48	74	2239	319.86	203.55	172.23	131.71	117.84	97.35	77.21	FALSE
2269	19	48	75	2269	324.14	206.27	174.54	133.47	119.42	98.65	78.24	FALSE
2299	19	48	76	2299	328.43	209.00	176.85	135.24	121.00	99.96	79.28	TRUE
2329	19	49	77	2329	332.71	211.73	179.15	137.00	122.58	101.26	80.31	TRUE
2359	19	49	78	2359	337.00	214.45	181.46	138.76	124.16	102.57	81.34	TRUE
2389	19	49	79	2389	341.29	217.18	183.77	140.53	125.74	103.87	82.38	FALSE
2419	19	50	80	2419	345.57	219.91	186.08	142.29	127.32	105.17	83.41	FALSE
2449	19	50	81	2449	349.86	222.64	188.38	144.06	128.89	106.48	84.45	FALSE
2479	19	50	82	2479	354.14	225.36	190.69	145.82	130.47	107.78	85.48	FALSE
2509	19	50	83	2509	358.43	228.09	193.00	147.59	132.05	109.09	86.52	TRUE
2539	19	51	84	2539	362.71	230.82	195.31	149.35	133.63	110.39	87.55	FALSE
2569	19	51	85	2569	367.00	233.55	197.62	151.12	135.21	111.70	88.59	TRUE
2599	19	51	86	2599	371.29	236.27	199.92	152.88	136.79	113.00	89.62	TRUE
2629	19	52	87	2629	375.57	239.00	202.23	154.65	138.37	114.30	90.66	TRUE
2659	19	52	88	2659	379.86	241.73	204.54	156.41	139.95	115.61	91.69	FALSE
2689	19	52	89	2689	384.14	244.45	206.85	158.18	141.53	116.91	92.72	FALSE
2719	19	53	90	2719	388.43	247.18	209.15	159.94	143.11	118.22	93.76	FALSE
2749	19	53	91	2749	392.71	249.91	211.46	161.71	144.68	119.52	94.79	FALSE
2779	19	53	92	2779	397.00	252.64	213.77	163.47	146.26	120.83	95.83	TRUE
2809	19	53	93	2809	401.29	255.36	216.08	165.24	147.84	122.13	96.86	FALSE
2839	19	54	94	2839	405.57	258.09	218.38	167.00	149.42	123.43	97.90	TRUE
2869	19	54	95	2869	409.86	260.82	220.69	168.76	151.00	124.74	98.93	TRUE
2899	19	54	96	2899	414.14	263.55	223.00	170.53	152.58	126.04	99.97	TRUE
2929	19	55	97	2929	418.43	266.27	225.31	172.29	154.16	127.35	101.00	TRUE
2959	19	55	98	2959	422.71	269.00	227.62	174.06	155.74	128.65	102.03	TRUE
2989	19	55	99	2989	427.00	271.73	229.92	175.82	157.32	129.96	103.07	TRUE
3019	19	55	100	3019	431.29	274.45	232.23	177.59	158.89	131.26	104.10	FALSE
3049	19	56	101	3049	435.57	277.18	234.54	179.35	160.47	132.57	105.14	FALSE

<b>*fam7</b>	<b>*fam11</b>	<b>*fam13</b>	<b>*fam17</b>	<b>*fam19</b>	<b>*fam23</b>	<b>*fam29</b>
<b>7 and +30</b>	<b>29 and +30</b>	<b>13 and + 30</b>	<b>17 and + 30</b>	<b>1 and + 30</b>	<b>23 and + 30</b>	<b>11 and + 30</b>
<b>L1 and +7</b>	<b>L10 and + 11</b>	<b>L5 and + 13</b>	<b>L9 and + 17</b>	<b>L0 and +19</b>	<b>L17 and + 23</b>	<b>L10 and + 29</b>

ps	start	sq root	level 19	*fam1 by 1	*fam7 by 7	*fam11 by 11	*fam13 by 13	*fam17 by 17	*fam19 by 19	*fam23 by 23	*fam29 by 29	Factor
3079	19	56	102	3079	439.86	279.91	236.85	181.12	162.05	133.87	106.17	FALSE
3109	19	56	103	3109	444.14	282.64	239.15	182.88	163.63	135.17	107.21	FALSE
3139	19	56	104	3139	448.43	285.36	241.46	184.65	165.21	136.48	108.24	FALSE
3169	19	57	105	3169	452.71	288.09	243.77	186.41	166.79	137.78	109.28	FALSE
3199	19	57	106	3199	457.00	290.82	246.08	188.18	168.37	139.09	110.31	TRUE
3229	19	57	107	3229	461.29	293.55	248.38	189.94	169.95	140.39	111.34	FALSE
3259	19	57	108	3259	465.57	296.27	250.69	191.71	171.53	141.70	112.38	FALSE
3289	19	58	109	3289	469.86	299.00	253.00	193.47	173.11	143.00	113.41	TRUE
3319	19	58	110	3319	474.14	301.73	255.31	195.24	174.68	144.30	114.45	FALSE
3349	19	58	111	3349	478.43	304.45	257.62	197.00	176.26	145.61	115.48	TRUE
3379	19	59	112	3379	482.71	307.18	259.92	198.76	177.84	146.91	116.52	FALSE
3409	19	59	113	3409	487.00	309.91	262.23	200.53	179.42	148.22	117.55	TRUE
3439	19	59	114	3439	491.29	312.64	264.54	202.29	181.00	149.52	118.59	TRUE
3469	19	59	115	3469	495.57	315.36	266.85	204.06	182.58	150.83	119.62	FALSE
3499	19	60	116	3499	499.86	318.09	269.15	205.82	184.16	152.13	120.66	FALSE
3529	19	60	117	3529	504.14	320.82	271.46	207.59	185.74	153.43	121.69	FALSE
3559	19	60	118	3559	508.43	323.55	273.77	209.35	187.32	154.74	122.72	FALSE
3589	19	60	119	3589	512.71	326.27	276.08	211.12	188.89	156.04	123.76	FALSE
3619	19	61	120	3619	517.00	329.00	278.38	212.88	190.47	157.35	124.79	TRUE
3649	19	61	121	3649	521.29	331.73	280.69	214.65	192.05	158.65	125.83	FALSE
3679	19	61	122	3679	525.57	334.45	283.00	216.41	193.63	159.96	126.86	TRUE
3709	19	61	123	3709	529.86	337.18	285.31	218.18	195.21	161.26	127.90	FALSE
3739	19	62	124	3739	534.14	339.91	287.62	219.94	196.79	162.57	128.93	FALSE
3769	19	62	125	3769	538.43	342.64	289.92	221.71	198.37	163.87	129.97	FALSE
3799	19	62	126	3799	542.71	345.36	292.23	223.47	199.95	165.17	131.00	TRUE
3829	19	62	127	3829	547.00	348.09	294.54	225.24	201.53	166.48	132.03	TRUE
3859	19	63	128	3859	551.29	350.82	296.85	227.00	203.11	167.78	133.07	TRUE
3889	19	63	129	3889	555.57	353.55	299.15	228.76	204.68	169.09	134.10	FALSE
3919	19	63	130	3919	559.86	356.27	301.46	230.53	206.26	170.39	135.14	FALSE
3949	19	63	131	3949	564.14	359.00	303.77	232.29	207.84	171.70	136.17	TRUE
3979	19	63	132	3979	568.43	361.73	306.08	234.06	209.42	173.00	137.21	TRUE
4009	19	64	133	4009	572.71	364.45	308.38	235.82	211.00	174.30	138.24	TRUE
4039	19	64	134	4039	577.00	367.18	310.69	237.59	212.58	175.61	139.28	TRUE
4069	19	64	135	4069	581.29	369.91	313.00	239.35	214.16	176.91	140.31	TRUE