

FreeProductsComparisonMagma

September 4, 2018

Group : $C_2 * C_3$

Searching up to index : 2500

How many normal groups are found : 521

Total Time in s : 521.7

Group : $C_2 * C_3$

Searching up to index : 2500

How many normal groups are found : 521

Total Time in s : 513.5

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	521.7	416.89999999999998
FindPQuotients	247	247	469.8	155.
FindTQuotients	1	1	17.6	0.5999999999999998
FindIntersections	246	246	34.2	261.30000000000001
AddGroup	868	604	379.3	368.80000000000001

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	513.5	416.89999999999998
FindPQuotients	247	247	465.8	155.
FindTQuotients	1	1	17.7	0.5999999999999998
FindIntersections	246	246	29.8	261.30000000000001
AddGroup	868	604	370.9	368.80000000000001

Group : $C_2 * C_4$

Searching up to index : 500
How many normal groups are found : 688
Total Time in s : 413.2
Group : $C_2 * C_4$
Searching up to index : 500
How many normal groups are found : 688
Total Time in s : 393.9

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	413.2	157.80000000000001
FindPQuotients	305	305	397.8	90.700000000000003
FindTQuotients	1	1	0.2	0.20000000000000001
FindIntersections	304	304	15.0	66.900000000000006
AddGroup	2534	852	287.8	102.

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	393.9	157.80000000000001
FindPQuotients	305	305	379.5	90.700000000000003
FindTQuotients	1	1	0.3	0.20000000000000001
FindIntersections	304	304	14.1	66.900000000000006
AddGroup	2534	852	273.7	102.

Group : $C_2 * C_5$
Searching up to index : 2000
How many normal groups are found : 203
Total Time in s : 203.0
Group : $C_2 * C_5$
Searching up to index : 2000
How many normal groups are found : 203
Total Time in s : 193.4

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	203.0	33.

FindPQuotients	88	88	190.9	30.199999999999999
FindTQuotients	1	1	7.1	0.2999999999999999
FindIntersections	87	87	4.9	2.399999999999999
AddGroup	353	225	131.0	6.5

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	193.4	33.
FindPQuotients	88	88	181.5	30.199999999999999
FindTQuotients	1	1	7.1	0.2999999999999999
FindIntersections	87	87	4.6	2.399999999999999
AddGroup	353	225	123.3	6.5

Group : $C_2 * C_6$

Searching up to index : 500

How many normal groups are found : 862

Total Time in s : 626.7

Group : $C_2 * C_6$

Searching up to index : 500

How many normal groups are found : 862

Total Time in s : 605.0

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	626.7	188.90000000000001
FindPQuotients	363	363	602.6	108.40000000000001
FindTQuotients	1	1	0.8	0.20000000000000001
FindIntersections	362	362	23.3	80.29999999999997
AddGroup	2042	1077	500.4	118.

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	605.0	188.90000000000001
FindPQuotients	363	363	581.9	108.40000000000001

FindTQuotients	1	1	0.8	0.20000000000000001
FindIntersections	362	362	22.2	80.299999999999997
AddGroup	2042	1077	482.4	118.

Group : $C_2 * C_7$

Searching up to index : 1000

How many normal groups are found : 63

Total Time in s : 22.8

Group : $C_2 * C_7$

Searching up to index : 1000

How many normal groups are found : 63

Total Time in s : 25.6

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	22.8	6.4000000000000004
FindPQuotients	26	26	22.1	6.0999999999999996
FindTQuotients	1	1	0.6	0.20000000000000001
FindIntersections	25	25	0.0	0.10000000000000001
AddGroup	91	69	11.7	0.5

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	25.6	6.4000000000000004
FindPQuotients	26	26	24.8	6.0999999999999996
FindTQuotients	1	1	0.7	0.20000000000000001
FindIntersections	25	25	0.0	0.10000000000000001
AddGroup	91	69	13.3	0.5

Group : $C_2 * C_8$

Searching up to index : 500

How many normal groups are found : 1187

Total Time in s : 4855.3

Group : $C_2 * C_8$

Searching up to index : 500

How many normal groups are found : 1187

Total Time in s : 4916.2

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	4855.3	365.
FindPQuotients	466	466	4807.5	231.69999999999999
FindTQuotients	1	1	0.9	0.20000000000000001
FindIntersections	465	465	46.8	133.09999999999999
AddGroup	12607	1688	3776.6	240.19999999999999

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	4916.2	365.
FindPQuotients	466	466	4864.9	231.69999999999999
FindTQuotients	1	1	1.0	0.20000000000000001
FindIntersections	465	465	50.1	133.09999999999999
AddGroup	12607	1688	3830.6	240.19999999999999

Group : $C_2 * C_9$

Searching up to index : 1000

How many normal groups are found : 358

Total Time in s : 197.5

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	197.5	61.39999999999999
FindPQuotients	184	184	181.7	48.299999999999997
FindTQuotients	1	1	5.3	0.2999999999999999
FindIntersections	183	183	10.4	12.9
AddGroup	675	445	135.5	23.800000000000001

Group : $C_2 * C_{10}$

Searching up to index : 500

How many normal groups are found : 469

Total Time in s : 101.5

Group : $C_2 * C_{10}$

Searching up to index : 500

How many normal groups are found : 469

Total Time in s : 104.6

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	101.5	87.099999999999994
FindPQuotients	227	227	94.4	49.5
FindTQuotients	1	1	0.2	0.20000000000000001
FindIntersections	226	226	6.9	37.399999999999999
AddGroup	633	551	70.1	51.899999999999999

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	104.6	87.099999999999994
FindPQuotients	227	227	97.2	49.5
FindTQuotients	1	1	0.2	0.20000000000000001
FindIntersections	226	226	7.1	37.399999999999999
AddGroup	633	551	72.9	51.899999999999999

Group : $C_2 * C_{11}$

Searching up to index : 1000

How many normal groups are found : 21

Total Time in s : 11.8

Group : $C_2 * C_{11}$

Searching up to index : 1000

How many normal groups are found : 21

Total Time in s : 12.0

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	11.8	1.5
FindPQuotients	6	6	2.5	1.3

FindTQuotients	1	1	9.3	0.20000000000000001
FindIntersections	5	5	0.0	0.
AddGroup	28	21	1.2	0.

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	12.0	1.5
FindPQuotients	6	6	2.7	1.3
FindTQuotients	1	1	9.3	0.20000000000000001
FindIntersections	5	5	0.0	0.
AddGroup	28	21	1.4	0.

Group : $C_2 * C_{12}$

Searching up to index : 150

How many normal groups are found : 355

Total Time in s : 85.4

Group : $C_2 * C_{12}$

Searching up to index : 150

How many normal groups are found : 355

Total Time in s : 88.1

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	85.4	37.799999999999997
FindPQuotients	152	152	78.8	34.200000000000003
FindTQuotients	1	1	0.0	0.20000000000000001
FindIntersections	151	151	6.5	3.3999999999999999
AddGroup	1071	473	57.2	6.

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	88.1	37.799999999999997
FindPQuotients	152	152	81.2	34.200000000000003
FindTQuotients	1	1	0.0	0.20000000000000001

FindIntersections	151	151	6.8	3.3999999999999999
AddGroup	1071	473	59.2	6.