

# FreeProductsComparisonMagma

August 5, 2018

**Group :**  $C_2 * C_3$

Searching up to index : 2500

How many normal groups are found : 527

Total Time in s : 789.2

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	789.2	401.38
FindPQuotients	527	247	758.0	142.00999999999991
FindTQuotients	1	1	18.4	0.6299999999999989
FindIntersections	526	246	12.6	258.73000000000008
AddGroup	1059	604	491.3	365.49000000000007

**Group :**  $C_2 * C_4$

Searching up to index : 500

How many normal groups are found : 688

Total Time in s : 318.5

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	318.5	142.22000000000003
FindPQuotients	688	305	306.6	75.949999999999875
FindTQuotients	1	1	0.2	0.1999999999998863
FindIntersections	687	304	11.6	66.060000000000173
AddGroup	1522	852	187.2	100.81000000000029

**Group :**  $C_2 * C_5$

Searching up to index : 2000

How many normal groups are found : 205

Total Time in s : 830.3

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	830.3	27.049999999999955
FindPQuotients	205	88	823.2	24.350000000000023
FindTQuotients	1	1	6.7	0.34000000000003183
FindIntersections	204	87	0.2	2.35999999999999
AddGroup	369	225	154.1	6.5199999999999818

**Group :**  $C_2 * C_6$

Searching up to index : 500

How many normal groups are found : 862

Total Time in s : 578.9

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	578.9	159.88
FindPQuotients	862	363	550.9	82.060000000000059
FindTQuotients	1	1	1.2	0.19999999999993179
FindIntersections	861	362	26.7	77.620000000000005
AddGroup	1896	1077	401.3	113.360000000000047

**Group :**  $C_2 * C_7$

Searching up to index : 1000

How many normal groups are found : 63

Total Time in s : 27.6

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	27.6	4.5099999999999909
FindPQuotients	63	26	26.8	4.2300000000000182
FindTQuotients	1	1	0.8	0.23000000000001819

FindIntersections	62	25	0.0	0.049999999999954525
AddGroup	83	69	9.6	0.57999999999981355

**Group :**  $C_2 * C_8$

Searching up to index : 500

How many normal groups are found : 1187

Total Time in s : 1677.0

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	1677.0	320.10999999999999
FindPQuotients	1187	466	1604.7	190.96999999999957
FindTQuotients	1	1	0.7	0.20999999999992269
FindIntersections	1186	465	71.4	128.92000000000041
AddGroup	2779	1688	1191.6	233.56999999999891

**Group :**  $C_2 * C_{10}$

Searching up to index : 500

How many normal groups are found : 469

Total Time in s : 177.3

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	177.3	73.170000000000073
FindPQuotients	469	227	173.9	36.289999999999736
FindTQuotients	1	1	0.2	0.19000000000005457
FindIntersections	468	226	3.1	36.67000000000003
AddGroup	944	551	79.2	50.970000000000709

**Group :**  $C_2 * C_{11}$

Searching up to index : 1000

How many normal groups are found : 21

Total Time in s : 15.2

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	15.2	1.0099999999999909
FindPQuotients	21	6	5.5	0.78999999999996362
FindTQuotients	1	1	9.6	0.22000000000002728
FindIntersections	20	5	0.0	0.
AddGroup	29	21	1.5	0.069999999999936335

**Group :**  $C_2 * C_{12}$

Searching up to index : 150

How many normal groups are found : 355

Total Time in s : 77.4

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	77.4	26.349999999999909
FindPQuotients	355	152	72.5	22.899999999999636
FindTQuotients	1	1	0.0	0.19000000000005457
FindIntersections	354	151	4.8	3.2500000000002274
AddGroup	748	473	52.9	5.699999999999136