FreeProductsComparisonMagma

September 10, 2018

Group : $C_2 * C_3$
Searching up to index : 2500
How many normal groups are found : 527
Total Time in s : 112.7

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	112.7	387.5
FindPQuotients	247	247	86.0	134.5
FindTQuotients	1	1	17.7	0.6
FindIntersections	246	246	8.9	252.4
AddGroup	724	604	16.8	356.1
MustCheckP	1706	994	0.0	0
FindPModules	932	285	85.9	134.5
SMTX_BasesMaximalSubmodules	272	266	14.4	0.6
PullBackH	404	383	14.0	3.7

Group : $C_2 * C_4$
Searching up to index : 500
How many normal groups are found : 688
Total Time in s : 50.1

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	50.1	129.4
FindPQuotients	305	305	41.4	65.7
FindTQuotients	1	1	0.3	0.2

FindIntersections	304	304	8.4	63.5
AddGroup	903	852	15.4	97
MustCheckP	1182	955	0.0	0.1
FindPModules	596	381	41.3	65.59999999999999
SMTX_BasesMaximalSubmodules	331	331	7.4	0.4
PullBackH	599	474	4.8	0.9

Group : $C_2 * C_5$

Searching up to index : 2000

How many normal groups are found : 205

Total Time in s : 67.3

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	67.3	25.2
FindPQuotients	88	88	58.9	22.6
FindTQuotients	1	1	7.2	0.3
FindIntersections	87	87	1.1	2.3
AddGroup	344	225	5.9	5.9
MustCheckP	894	349	0.0	0
FindPModules	592	96	58.9	22.6
SMTX_BasesMaximalSubmodules	96	86	12.4	0.5
PullBackH	173	157	14.8	1.4

Group : $C_2 * C_6$

Searching up to index : 500

How many normal groups are found : 862

Total Time in s : 63.1

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	63.1	151.7
FindPQuotients	363	363	53.3	76.59999999999999
FindTQuotients	1	1	0.5	0.2
FindIntersections	362	362	9.1	74.90000000000001

AddGroup	1145	1077	17.2	109.8
MustCheckP	1344	1090	0.0	0.1
FindPModules	683	456	53.3	76.5
SMTX_BasesMaximalSubmodules	398	397	8.9	0.5
PullBackH	770	620	7.9	1.4

Group : $C_2 * C_7$
Searching up to index : 1000
How many normal groups are found : 63
Total Time in s : 8.3

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	8.3	4.1
FindPQuotients	26	26	7.6	3.8
FindTQuotients	1	1	0.5	0.2
FindIntersections	25	25	0.0	0.1
AddGroup	79	69	0.5	0.6
MustCheckP	385	92	0.0	0
FindPModules	299	35	7.6	3.8
SMTX_BasesMaximalSubmodules	29	29	1.2	0
PullBackH	55	52	1.8	0.3

Group : $C_2 * C_8$
Searching up to index : 500
How many normal groups are found : 1187
Total Time in s : 165.6

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	165.6	299.6
FindPQuotients	466	466	149.4	177
FindTQuotients	1	1	0.7	0.2
FindIntersections	465	465	15.3	122.4
AddGroup	1761	1688	35.9	223.1

MustCheckP	1581	1337	0.0	0
FindPModules	868	648	149.3	176.9
SMTX_BasesMaximalSubmodules	505	505	22.5	1.1
PullBackH	1353	1228	25.7	2.7

Group : $C_2 * C_9$
Searching up to index : 1000
How many normal groups are found : 358
Total Time in s : 51.5

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	51.5	41.1
FindPQuotients	184	184	42.0	29
FindTQuotients	1	1	5.7	0.2
FindIntersections	183	183	3.7	11.9
AddGroup	490	445	8.3	21.8
MustCheckP	916	563	0.0	0
FindPModules	485	186	42.0	28.9
SMTX_BasesMaximalSubmodules	168	167	6.1	0.3
PullBackH	339	328	8.9	1.3

Group : $C_2 * C_{10}$
Searching up to index : 500
How many normal groups are found : 469
Total Time in s : 34.9

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	34.9	68.40000000000001
FindPQuotients	227	227	28.6	33.1
FindTQuotients	1	1	0.2	0.2
FindIntersections	226	226	6.1	35.1
AddGroup	567	551	11.2	48.8
MustCheckP	951	732	0.0	0

Function				
FindPModules	458	257	28.5	33.1
SMTX_BasesMaximalSubmodules	236	236	4.2	0.2
PullBackH	367	223	4.5	0.4

Group : $C_2 * C_{11}$
Searching up to index : 1000
How many normal groups are found : 21
Total Time in s : 9.8

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	9.8	1
FindPQuotients	6	6	1.3	0.8
FindTQuotients	1	1	8.5	0.2
FindIntersections	5	5	0.0	0
AddGroup	28	21	0.2	0
MustCheckP	317	34	0.0	0
FindPModules	271	9	1.3	0.8
SMTX_BasesMaximalSubmodules	7	7	0.0	0
PullBackH	16	14	0.1	0

Group : $C_2 * C_{12}$
Searching up to index : 150
How many normal groups are found : 355
Total Time in s : 10.2

Function	Count_GAP	Count_MAGMA	Time_GAP	Time_MAGMA
LowIndexNormal	1	1	10.2	23.7
FindPQuotients	152	152	9.4	20.4
FindTQuotients	1	1	0.0	0.1
FindIntersections	151	151	0.7	3.1
AddGroup	476	473	1.9	5.6
MustCheckP	494	423	0.0	0
FindPModules	308	237	9.3	20.4

SMTX_BasesMaximalSubmodules	181	181	1.7	0.2
PullBackH	378	339	0.8	0.3