

FreeProductsExtendedProfile

July 6, 2018

Group : $C_2 * C_3$

Searching up to index : 2500

How many normal groups are found : 527

Total Time in ms : 522870

Count	AbsT/ms	ChildT/ms	AbsS/kb	ChildS/kb	Function
0	0	0	0	0	EpimorphismPGroup
1706	9	0	426104	0	NextPrimeInt
5720	597	16	115259382	398544	GroupHomomorphismByImagesNC
35124	677	4	76640530	0	GModuleByMats
863	1130	0	302522564	0	NaturalHomomorphismBySubspace
509862	1265	23	208584922	558368	Index
2382723	2386	178	32765008	0	GeneratorsOfMagmaWithInverses
2	5176	50	1506900781	589072	LowIndexSubgroupsFpGroup
367184	5641	349	1364685795	14313536	Intersection
5032	7480	5464	1924299031	1350626832	Core
526	7934	7631	4146484692	4118208844	FindIntersections
313377	8208	7	4404501056	0	ExponentSum
189576	12687	147	6256692914	169552	PreImagesRepresentative
1	13305	13249	3585183074	3585180378	FindTQuotients
501344	19070	283	10947953352	308192	Image
863	22358	4642	10453857013	2447786928	PullBackH
1095	31428	227	13426887384	5338716	IsomorphismFpGroup
11316	35687	861	28872462138	125742372	PreImage
863	35753	35664	28877732302	28870325796	Kernel
994	62813	204	17410509707	24415040	SMTX_BasesMaximalSubmodules
2620	92188	206	72208834962	1879936	IsSubgroup

1059	311248	93415	244670945010	72281733968	AddGroup
527	501629	493172	332516752986	330233293339	FindPQuotients
1	522870	522868	340248420896	340248420752	LowIndexNormal

Group : $C_2 * C_4$

Searching up to index : 500

How many normal groups are found : 688

Total Time in ms : 230478

Count	AbsT/ms	ChildT/ms	AbsS/kb	ChildS/kb	Function
0	0	0	0	0	EpimorphismPGroup
1182	7	1	197456	0	NextPrimeInt
2	23	2	4814263	21760	LowIndexSubgroupsFpGroup
199	86	55	14172729	9244162	Core
1	221	221	43142220	43140964	FindTQuotients
22438	335	6	39341983	0	GModuleByMats
7311	559	17	78237966	485280	GroupHomomorphismByImagesNC
1362	723	0	191331350	0	NaturalHomomorphismBySubspace
459746	729	0	45651412	534802	Intersection
892357	1490	67	189589922	871968	Index
2268212	2281	189	21822912	0	GeneratorsOfMagmaWithInverses
210644	2952	0	1541182376	0	ExponentSum
114726	4738	116	2147639218	164848	PreImagesRepresentative
687	8655	7993	3439063647	3348228271	FindIntersections
374430	9717	194	4238599973	424912	Image
1362	10194	1748	4598222632	916525832	PullBackH
2940	15086	988	7186748804	128801510	PreImage
1362	15190	15088	7198436130	7186788594	Kernel
1377	16705	221	6772288679	6004666	IsomorphismFpGroup
955	32631	145	12713984992	17369064	SMTX_BasesMaximalSubmodules
6166	44764	467	29408241932	4380400	IsSubgroup
1522	132257	46719	78267873599	29501741872	AddGroup
688	221599	216231	114979648375	113493649375	FindPQuotients
1	230478	230474	118461854386	118461854242	LowIndexNormal

Group : $C_2 * C_5$

Searching up to index : 2000

How many normal groups are found : 205

Total Time in ms : 524868

Count	AbsT/ms	ChildT/ms	AbsS/kb	ChildS/kb	Function
0	0	0	0	0	EpimorphismPGroup
894	2	0	228296	0	NextPrimeInt
2018	224	4	57024786	152288	GroupHomomorphismByImagesNC
204	249	202	72516859	69893579	FindIntersections
18352	298	0	31311722	0	GModuleByMats
231	542	0	167218567	0	NaturalHomomorphismBySubspace
295110	705	94	71310118	140944	Index
992288	983	64	14633104	0	GeneratorsOfMagmaWithInverses
2	1077	27	284424722	294976	LowIndexSubgroupsFpGroup
84342	2257	164	443951478	6335452	Intersection
3194	3027	2271	636667262	444488980	Core
133540	5210	0	2822318480	0	ExponentSum
1	5344	5314	1260445650	1260443146	FindTQuotients
97152	8495	73	4254159192	58000	PreImagesRepresentative
4566	8986	243	4943335705	40831530	PreImage
231	8998	8975	4944460017	4942445739	Kernel
244642	10249	170	4474404312	96464	Image
231	13275	2677	6837098478	1462107536	PullBackH
411	24749	96	10695949278	2216880	IsomorphismFpGroup
1798	43283	121	28810221868	1211680	IsSubgroup
369	97436	43527	66930832307	28817340048	AddGroup
349	286924	100	84454166598	12917094	SMTX_BasesMaximalSubmodules
205	519274	452597	211439337175	183812741906	FindPQuotients
1	524868	524868	212772299828	212772299684	LowIndexNormal

Group : $C_2 * C_6$

Searching up to index : 500

How many normal groups are found : 862

Total Time in ms : 423296

Count	AbsT/ms	ChildT/ms	AbsS/kb	ChildS/kb	Function
0	0	0	0	0	EpimorphismPGroup
1344	7	0	220696	0	NextPrimeInt
2	34	0	10420744	36112	LowIndexSubgroupsFpGroup
400	177	130	34833834	23142036	Core
31718	443	0	51713202	0	GModuleByMats
1	551	549	128806206	128804646	FindTQuotients
8857	757	13	102744904	603056	GroupHomomorphismByImagesNC
1665	1031	0	224337666	0	NaturalHomomorphismBySubspace
728852	1186	2	78017460	957824	Intersection
1387327	2338	97	265624022	1099680	Index
278083	4116	31	1945317968	0	ExponentSum
3856753	4595	282	36092016	0	GeneratorsOfMagmaWithInverses
135018	5878	106	2452334567	189472	PreImagesRepresentative
489954	11736	302	3956806214	517680	Image
1665	15311	2694	5882035477	1246783856	PullBackH
861	20504	19495	6735997104	6607622488	FindIntersections
3742	20633	1357	8902839766	164208038	PreImage
1665	20806	20633	8917088648	8902838250	Kernel
1725	24724	297	9749870316	7685950	IsomorphismFpGroup
1090	34191	192	8627715224	25359938	SMTX_BasesMaximalSubmodules
12381	108684	1221	58802743619	8437232	IsSubgroup
1896	294305	112571	136911998394	58949157035	AddGroup
862	402237	390980	174318389307	170885311396	FindPQquotients
1	423296	423292	181183192761	181183192617	LowIndexNormal

Group : $C_2 * C_7$

Searching up to index : 1000

How many normal groups are found : 63

Total Time in ms : 20324

Count	AbsT/ms	ChildT/ms	AbsS/kb	ChildS/kb	Function
0	0	0	0	0	EpimorphismPGroup
385	0	0	98656	0	NextPrimeInt
62	24	21	5531743	5319959	FindIntersections
2716	41	0	4360270	0	GModuleByMats

679	56	4	10704296	45008	GroupHomomorphismByImagesNC
10756	58	5	8558192	36032	Index
59	67	0	18937454	0	NaturalHomomorphismBySubspace
2	86	2	24203764	41104	LowIndexSubgroupsFpGroup
142460	137	8	2125248	0	GeneratorsOfMagmaWithInverses
9180	247	19	49614388	819464	Intersection
518	339	258	71729386	49726928	Core
19748	452	2	256102880	0	ExponentSum
1	532	530	116424906	116424226	FindTQuotients
13316	736	20	373808282	15392	PreImagesRepresentative
634	1034	41	431424651	7144320	PreImage
34834	1035	16	422827436	23392	Image
59	1042	1033	431882327	431336437	Kernel
59	1360	236	660928596	140346096	PullBackH
178	2398	6	1595282479	126496	IsSubgroup
127	2801	15	1232821383	601372	IsomorphismFpGroup
92	3770	17	1211535702	1844788	SMTX_BasesMaximalSubmodules
83	6672	2436	4508559100	1596110863	AddGroup
63	19767	17662	9666894285	8965542565	FindPQuotients
1	20324	20323	9788851078	9788850934	LowIndexNormal

Group : $C_2 * C_8$

Searching up to index : 500

How many normal groups are found : 1187

Total Time in ms : 1171825

Count	AbsT/ms	ChildT/ms	AbsS/kb	ChildS/kb	Function
0	0	0	0	0	EpimorphismPGroup
1581	7	0	248744	0	NextPrimeInt
2	47	4	11828363	29344	LowIndexSubgroupsFpGroup
415	185	125	36062318	23603518	Core
1	645	645	148903513	148901745	FindTQuotients
57544	792	16	110947208	0	GModuleByMats
12697	1306	18	152058286	854272	GroupHomomorphismByImagesNC
1380292	1912	49	132690006	1269344	Intersection
2484	2229	0	598365845	0	NaturalHomomorphismBySubspace

2896544	4134	162	499492368	1581344	Index
511527	10916	52	5344880488	0	ExponentSum
11258618	11816	625	84278064	0	GeneratorsOfMagmaWithInverses
319824	16389	306	7320084684	241808	PreImagesRepresentative
1131466	29874	599	11066586392	754672	Image
2484	36535	6641	15886051819	3281382456	PullBackH
5400	42897	2093	17879417518	280777594	PreImage
2484	43116	42894	17900595824	17879412012	Kernel
1186	48292	45872	19500564365	19134031933	FindIntersections
2375	85787	566	28461191453	10702196	IsomorphismFpGroup
1337	120224	325	45286411396	52506022	SMTX_BasesMaximalSubmodules
39611	341674	3802	180466547481	26532016	IsSubgroup
2779	803657	350612	390075848365	180771484215	AddGroup
1187	1122882	1098088	508278245971	499699522083	FindPQuotients
1	1171825	1171822	527927713993	527927713849	LowIndexNormal