

Character Tables of Multiplicity-Free Endomorphism Rings

$G = B$ (no. 4)

$H = Fi_{23}$

rank: 23

degree: 1015970529280000

	O_1	O_2	O_3	O_4	O_5
$1a$	1	412896	86316516	195747435	8537488128
$4371a$	1	-137632	18115812	-10472085	-1159411968
$96255a$	1	82016	8890596	5701995	457037568
$9458750a$	1	41888	3232548	-43605	123026688
$63532485a$	1	-32032	2275812	414315	-77223168
$347643114a$	1	10208	704484	1589355	10679040
$356054375a$	1	-17248	900900	-1508949	-20097792
$4221380670a$	1	-3232	324324	103275	-2453760
$4275362520a$	1	14816	725796	-43605	16743168
$9287037474a$	1	6896	132516	699435	736128
$13508418144a$	1	-11632	475812	111915	-9283968
$108348770530a$	1	7328	246564	-43605	3421440
$309720864375a$	1	-1120	89892	-181845	-172800
$635966233056a$	1	3408	69284	147755	295040
$1095935366250a$	1	-4576	126756	2475	-1324800
$6145833622500a$	1	2864	51876	-26325	316800
$6619124890560a$	1	1088	39204	25515	138240
$12927978301875a$	1	-2128	19620	-40149	67968
$38348970335820a$	1	-1232	15524	37675	19840
$89626740328125a$	1	944	1188	15147	-79488
$211069033500000a$	1	560	1188	-12501	-51840
$284415522641250b$	1	-16	-5724	8235	17280
$364635285437500a$	1	-400	-1116	-5589	26496

	O_6	O_7	O_8
$1a$	23478092352	33816182400	113778447552
$4371a$	1449264960	3757353600	1404672192
$96255a$	327742272	1297296000	-1788671808
$9458750a$	57841344	314160000	183218112
$63532485a$	-2312640	179625600	-32332608
$347643114a$	46398528	-9609600	57081024
$356054375a$	43902144	32672640	-21155904
$4221380670a$	15121728	-12297600	-15494976
$4275362520a$	-7316928	31920000	14841792
$9287037474a$	11096352	4502400	-38864448
$13508418144a$	-491040	17673600	7584192
$108348770530a$	1729728	4502400	-11866176
$309720864375a$	3172032	-3638400	6934464
$635966233056a$	2450528	-169600	6681024
$1095935366250a$	-949824	1061760	-254016
$6145833622500a$	-507744	309120	1197504
$6619124890560a$	-300672	-1065600	-1498176
$12927978301875a$	706464	186240	-627264
$38348970335820a$	-69472	-233600	-576
$89626740328125a$	61344	63360	36288
$211069033500000a$	12960	-68736	-129600
$284415522641250b$	50976	78720	-46656
$364635285437500a$	-71136	-7296	119232

	O_9	O_{10}	O_{11}
$1a$	160533964800	504245392560	1044084577536
$4371a$	-5945702400	39426594480	-21483221760
$96255a$	-511948800	12027702960	-9527341824
$9458750a$	258508800	1991288880	1252323072
$63532485a$	35481600	1084693680	550851840
$347643114a$	-167270400	224426160	533820672
$356054375a$	63866880	185985072	-186810624
$4221380670a$	74188800	87499440	-219034368
$4275362520a$	4147200	110118960	-61012224
$9287037474a$	20044800	-21727440	115105536
$13508418144a$	-18662400	32946480	-61205760
$108348770530a$	-6912000	5609520	-1790208
$309720864375a$	-6912000	12798000	19554048
$635966233056a$	5913600	-1900240	-8656128
$1095935366250a$	1935360	-841680	6983424
$6145833622500a$	691200	-2857680	2467584
$6619124890560a$	-460800	2430000	-1928448
$12927978301875a$	-414720	-2332368	-1292544
$38348970335820a$	76800	-292560	472832
$89626740328125a$	-709632	-452304	-850176
$211069033500000a$	248832	73008	200448
$284415522641250b$	138240	114480	532224
$364635285437500a$	-82944	86832	-352512

	O_{12}	O_{13}	O_{14}
$1a$	1152560897280	1584771233760	5282570779200
$4371a$	-4743048960	-110868769440	65216923200
$96255a$	6966984960	30484602720	28447848000
$9458750a$	-1021697280	4906012320	-3514104000
$63532485a$	-432034560	-2400567840	1235995200
$347643114a$	271607040	-9741600	916660800
$356054375a$	778242816	-259829856	-2109032640
$4221380670a$	-142145280	29121120	499867200
$4275362520a$	62588160	198033120	197640000
$9287037474a$	171953280	32315760	217339200
$13508418144a$	-22584960	-74323440	-10756800
$108348770530a$	-28857600	-1265760	-80222400
$309720864375a$	-7568640	3745440	-43200
$635966233056a$	8992640	-2385200	-15211200
$1095935366250a$	3168000	10755360	2721600
$6145833622500a$	-777600	-4879440	5417280
$6619124890560a$	3732480	-3810240	648000
$12927978301875a$	-307584	-943056	2928960
$38348970335820a$	-1668480	588720	-1924800
$89626740328125a$	134784	854064	938304
$211069033500000a$	-335232	518832	-720576
$284415522641250b$	-293760	-481680	25920
$364635285437500a$	508032	-42768	191808

	O_{15}	O_{16}	O_{17}
$1a$	7888639030272	12678169870080	21514470082560
$4371a$	-292171815936	573908924160	-796832225280
$96255a$	58091185152	118446831360	158430504960
$9458750a$	3727696896	12802648320	10166446080
$63532485a$	-300174336	4718165760	-4534548480
$347643114a$	2067158016	-1656357120	-679311360
$356054375a$	-1909619712	-643458816	1675634688
$4221380670a$	-274627584	-544631040	-5806080
$4275362520a$	-366363648	5218560	-75479040
$9287037474a$	-118153728	122446080	-322237440
$13508418144a$	200600064	-34179840	269982720
$108348770530a$	35030016	-96802560	-145152000
$309720864375a$	-48356352	-17729280	18524160
$635966233056a$	36246016	7220480	-39797760
$1095935366250a$	1741824	-31921920	-5806080
$6145833622500a$	-5515776	518400	14515200
$6619124890560a$	5308416	933120	14100480
$12927978301875a$	787968	6269184	7216128
$38348970335820a$	-2025984	4348160	-1582080
$89626740328125a$	-1866240	518400	-746496
$211069033500000a$	898560	1237248	-1410048
$284415522641250b$	-262656	-1416960	2903040
$364635285437500a$	290304	-311040	-1741824

	O_{18}	O_{19}	O_{20}
$1a$	43028940165120	50712679480320	133120783635840
$4371a$	531221483520	1460859079680	-2739110774400
$96255a$	-222361251840	239651343360	190079809920
$9458750a$	20332892160	7936220160	8210885760
$63532485a$	-8511713280	-1053803520	12753417600
$347643114a$	1892782080	3994721280	-5895711360
$356054375a$	1177473024	3238050816	-155675520
$4221380670a$	592220160	722856960	813214080
$4275362520a$	-452874240	-1233239040	-1778474880
$9287037474a$	661893120	-489991680	959091840
$13508418144a$	836075520	-664312320	-183254400
$108348770530a$	-11612160	83082240	268168320
$309720864375a$	-16035840	-61793280	98133120
$635966233056a$	-41656320	-22725120	16717440
$1095935366250a$	-58060800	36449280	-18264960
$6145833622500a$	11612160	15137280	9797760
$6619124890560a$	-9953280	-9953280	-18195840
$12927978301875a$	-6967296	-2225664	-16744320
$38348970335820a$	5468160	-919040	-1537920
$89626740328125a$	-1658880	2198016	3825792
$211069033500000a$	995328	-1893888	-4053888
$284415522641250b$	-1658880	-69120	-3058560
$364635285437500a$	995328	705024	4572288

	O_{21}	O_{22}	O_{23}
$1a$	190172548051200	262954634342400	283991005089792
$4371a$	-782603078400	3246353510400	-1168687263744
$96255a$	-857327328000	28598169600	218194808832
$9458750a$	47791814400	-25333862400	-90188550144
$63532485a$	10828857600	-17953689600	3908653056
$347643114a$	1568160000	-10005811200	6838013952
$356054375a$	-44478720	-6826659840	4981616640
$4221380670a$	-13996800	-1025740800	-578285568
$4275362520a$	666144000	148377600	2518290432
$9287037474a$	-1020988800	174182400	-479582208
$13508418144a$	-1004918400	593510400	125024256
$108348770530a$	-170553600	212889600	-59609088
$309720864375a$	-116640000	190771200	-74649600
$635966233056a$	9264000	80076800	-41576448
$1095935366250a$	41644800	94187520	-83349504
$6145833622500a$	-15085440	-21934080	-10450944
$6619124890560a$	27993600	27648000	-35831808
$12927978301875a$	22654080	-8663040	-276480
$38348970335820a$	-7036800	-17100800	23365632
$89626740328125a$	6065280	-4534272	-3815424
$211069033500000a$	-1316736	-2764800	8570880
$284415522641250b$	51840	6082560	-2709504
$364635285437500a$	-1026432	-700416	-3151872

References

- [MNW07] J. Müller, M. Neunhöffer, and R. A. Wilson. Enumerating big orbits and an application: B acting on the cosets of Fi_{23} . *J. Algebra*, 314(1):75–96, 2007.