$HS.2$

M_{11}	11200	1a$^{\pm}$ + 22a$^{\pm}$ + 77a$^{\pm}$ + 154bc + 175a$^{\pm}$ + 770a$^{\pm}$ + 825a$^{\pm}$ + 1056a$^{\pm}$ + 2520a$^{\pm}$	17

Character Numbers: [1, 2, 3, 4, 5, 6, 9, 10, 11, 16, 17, 19 , 20, 22, 23, 34, 35]

	S_1	S_2	S_3	S_4	S_5	S_6	S_7	S_8	S_9	S_{10}	S_{11}	S_{12}	S_{13}	S_{14}	S_{15}	S_{16}	S_{17}
χ_1	1	12	55	110	132	165	330	396	495	660	660	792	792	1320	1320	1980	1980
χ_2	1	-12	55	-110	132	165	-330	-396	495	660	-660	-792	792	-1320	1320	-1980	1980
χ_3	1	-8	5	60	52	-85	-20	96	195	-140	-40	-288	72	320	-280	-120	180
χ_4	1	8	5	-60	52	-85	20	-96	195	-140	40	288	72	-320	-280	120	180
χ_5	1	7	-20	35	37	40	55	-54	45	85	-140	72	-138	70	-80	-45	30
χ_6	1	-7	-20	-35	37	40	-55	54	45	85	140	-72	-138	-70	-80	45	30
χ_7	1	0	-19	0	-12	-21	0	0	27	84	0	0	72	0	-24	0	-108
χ_8	1	4	7	26	4	37	-50	36	63	-44	28	72	24	-8	40	-108	-132
χ_9	1	-4	7	-26	4	37	50	-36	63	-44	-28	-72	24	8	40	108	-132
χ_{10}	1	-5	-4	15	13	-16	-5	-30	-3	-11	20	0	-18	-10	56	15	-18
χ_{11}	1	5	-4	-15	13	-16	5	30	-3	-11	-20	0	-18	10	56	-15	-18
χ_{12}	1	-1	12	11	-11	-8	15	26	13	21	-12	-8	-26	-58	0	27	-2
χ_{13}	1	1	12	-11	-11	-8	-15	-26	13	21	12	8	-26	58	0	-27	-2
χ_{14}	1	5	6	5	13	4	15	-10	-23	9	30	-20	22	-10	-24	-15	-8
χ_{15}	1	-5	6	-5	13	4	-15	10	-23	9	-30	20	22	10	-24	15	-8
χ_{16}	1	$r5$	-4	$r5$	-7	4	$-7r5$	$-2r5$	-3	-11	$-4r5$	$-4r5$	2	$-2r5$	-4	$17r5$	22
χ_{17}	1	$-r5$	-4	$-r5$	-7	4	$7r5$	$2r5$	-3	-11	$4r5$	$4r5$	2	$2r5$	-4	$-17r5$	22

Ramanujan Graphs: [2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 4, 5, 6, 9, 10, 11, 12, 14, 15, 16, 17], [2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 4, 5, 8, 9, 10, 12, 14, 15, 16, 17], [2, 3, 4, 5, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 4, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 4, 6, 8, 9, 10, 12, 14, 15, 16, 17], [2, 3, 4, 6, 9, 11, 12, 13, 14, 15, 16, 17], [2, 3, 4, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 4, 8, 9, 10, 12, 14, 15, 16, 17], [2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17], [2, 3, 5, 6, 8, 12, 13, 14, 15, 16, 17], [2, 3, 5, 6, 9, 12, 14, 15, 16, 17], [2, 3, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 5, 7, 8, 10, 12, 13, 14, 15, 16, 17], [2, 3, 5, 7, 8, 11, 12, 14, 15, 17], [2, 3, 5, 8, 9, 10, 12, 14, 15, 16, 17], [2, 3, 5, 9, 10, 11, 12, 14, 15, 16, 17], [2, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 6, 8, 9, 10, 12, 14, 15, 16, 17], [2, 3, 6, 9, 11, 14, 15, 16, 17], [2, 3, 6, 9, 12, 14, 15, 16, 17], [2, 3, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 3, 8, 9, 10, 12, 14, 15, 16, 17], [2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 4, 5, 6, 9, 10, 11, 12, 14, 15, 16, 17], [2, 4, 5, 7, 8, 11, 15, 16, 17], [2, 4, 5, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 4, 5, 10, 11, 12, 13, 14, 15, 16, 17], [2, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 4, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 4, 6, 8, 9, 12, 13, 14, 15, 16, 17], [2, 4, 6, 9, 11, 12, 13, 14, 15, 16, 17], [2, 4, 7, 8, 11, 12, 14], [2, 4, 7, 8, 11, 12, 14, 16], [2, 4, 7, 8, 12, 14, 16], [2, 4, 7, 8, 16], [2, 4, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 4, 7, 11], [2, 4, 7, 11, 12, 14], [2, 4, 7, 11, 12, 14, 16], [2, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 4, 8, 9, 10, 12, 14, 15, 16, 17], [2, 4, 8, 11, 12, 14, 16], [2, 4, 8, 12, 14, 16], [2, 4, 8, 16], [2, 4, 11, 12, 14, 16], [2, 4, 16], [2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17], [2, 5, 6, 8, 12, 13, 14, 15, 16, 17], [2, 5, 6, 9, 12, 14, 15, 16, 17], [2, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 5, 7, 8, 10, 12, 13, 14, 15, 16, 17], [2, 5, 8, 9, 10, 12, 14, 15, 16, 17], [2, 5, 9, 10, 11, 12, 14, 15, 16, 17], [2, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 6, 8, 9, 10, 12, 14, 15, 16, 17], [2, 6, 9, 11, 14, 15, 16, 17], [2, 6, 9, 12, 14, 15, 16, 17], [2, 7, 8, 11, 12, 14], [2, 7, 8, 11, 12, 14, 16], [2, 7, 8, 12, 14, 16], [2, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17] , [2, 7, 11, 12, 14], [2, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [2, 8, 9, 10, 12, 14, 15, 16, 17], [2, 8, 11, 12, 14, 16], [2, 8, 12, 14, 16], [2, 8, 16], [2, 11, 12, 14], [2, 11, 12, 14, 16], [2, 12, 14, 16], [3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [3, 4, 5, 6, 9, 10, 11, 12, 14, 15, 16, 17], [3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [3, 4, 5, 8, 9, 10, 12, 14, 15, 16, 17], [3, 4, 5, 10, 11, 12, 13, 14, 15, 16, 17], [3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17], [3,

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