Slopes of U_t operators in rank 3

Gebhard Böckle, Peter Mathias Gräf, Theresa Kaiser

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This document contains further results of the computations explained in [BGK25]. Throughout, bold exponents denote multiplicities of the slopes. If for $\Gamma \in \{\mathrm{GL}_3(A), P_0, P_2\}$ the space of Γ-invariant harmonic cocycles is zero, the corresponding field in the table is empty. If for some k the space of $\Gamma_0(t)$-invariant harmonic cocycles is zero, the smaller spaces are zero as well and the entire row is omitted.

In each table, we mark the presumed newform slopes in blue. Let n' be the unique element $n' \in \{1, \ldots, q-1\}$ congruent to the current type modulo $(q-1)$. Then, as suggested in [BGK25], we expect the slopes $\frac{2}{3}(k - 3(n'-1))$ for U_1, respectively $\frac{1}{3}(k - 3(n'-1))$ for U_2 to be the only slopes that can occur for newforms for the group $\Gamma_0(t)$.

List of Tables

1 q = 2.

1.1 i = 1.

Table 1: Slopes for $q = 2$, $i = 1$. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
0				0^1
1		∞^1	0^1	$0^1, \infty^2$
2		$1^1, \infty^1$	$0^1, 1^1$	$0^1, 1^2, \infty^3$
3		$\frac{3}{2}^2, \infty^1$	$0^1, \frac{3}{2}^2$	$0^1, \frac{3}{2}^4, 2^1, \infty^4$
4	1^1	$1^1, 2^1, \infty^3$	$0^1, 1^2, 2^1, \infty^1$	$0^1, 1^2, 2^2, \frac{8}{3}^3, \infty^7$
5	2^1	$2^1, \frac{5}{2}^2, \infty^4$	$0^1, 2^3, \frac{5}{2}^2, \infty^1$	$0^1, 2^3, \frac{5}{2}^4, \frac{10}{3}^3, \infty^{10}$
6	1^1	$1^1, 3^3, \infty^5$	$0^1, 1^2, 3^5, \infty^1$	$0^1, 1^2, 3^8, 4^4, \infty^{13}$
7	$\frac{3}{2}^2$	$\frac{3}{2}^2, \frac{7}{2}^2, 4^1, \infty^7$	$0^1, \frac{3}{2}^4, 2^1, \frac{7}{2}^2, 4^2, \infty^2$	$0^1, \frac{3}{2}^4, 2^1, \frac{7}{2}^4, 4^3, \frac{14}{3}^6, \infty^{17}$
8	$1^1, 2^1$	$1^1, 2^1, 4^3, 5^1, \infty^9$	$0^1, 1^2, 2^2, \frac{8}{3}^3, 4^3, 5^1, 8^1, \infty^2$	$0^1, 1^2, 2^2, \frac{8}{3}^3, 4^6, 5^2, \frac{16}{3}^6, 8^1, \infty^{22}$
9	$2^1, 4^1$	$2^1, 4^1, \frac{9}{2}^4, 5^2, \infty^{10}$	$0^1, 2^3, \frac{10}{3}^3, 4^2, \frac{9}{2}^4, 5^2, 8^1, \infty^2$	$0^1, 2^3, \frac{10}{3}^3, 4^2, \frac{9}{2}^8, 5^4, 6^7, 8^1, \infty^{26}$
10	$1^1, 3^1, 4^1$	$1^1, 3^1, 4^1, 5^3, \frac{23}{4}^4, \infty^{12}$	$0^1, 1^2, 3^4, 4^3, 5^5, \frac{23}{4}^4, \infty^3$	$0^1, 1^2, 3^4, 4^3, 5^8, \frac{23}{4}^4, \frac{20}{3}^9, \infty^{31}$
11	$\frac{3}{2}^2, 4^2$	$\frac{3}{2}^2, 4^2, \frac{11}{2}^4, 6^1, \frac{13}{2}^2, \infty^{15}$	$0^1, \frac{3}{2}^4, 2^1, 4^5, \frac{11}{2}^8, 6^1, \frac{13}{2}^2, \infty^4$	$0^1, \frac{3}{2}^4, 2^1, 4^5, \frac{11}{2}^{12}, 6^2, \frac{13}{2}^4, \frac{22}{3}^{12}, \infty^{37}$
12	$1^1, 2^1, 5^2$	$1^1, 2^1, 5^2, 6^5, \frac{20}{3}^3, 9^1, \infty^{17}$	$0^1, 1^2, 2^2, \frac{8}{3}^3, 5^6, 6^7, \frac{20}{3}^3, 9^1, 16^1, \infty^4$	$0^1, 1^2, 2^2, \frac{8}{3}^3, 5^6, 6^{12}, \frac{20}{3}^6, 8^{13}, 9^2, 16^1, \infty^{43}$
13	$2^1, \frac{5}{2}^2, 6^2$	$2^1, \frac{5}{2}^2, 6^2, \frac{13}{2}^4, 7^2, \frac{22}{3}^3, 10^1, \infty^{20}$	$0^1, 2^3, \frac{5}{2}^4, \frac{10}{3}^3, 6^7, \frac{13}{2}^4, 7^2, \frac{22}{3}^3, 8^1, 10^1, 16^1, \infty^5$	$0^1, 2^3, \frac{5}{2}^4, \frac{10}{3}^3, 6^7, \frac{13}{2}^8, 7^4, \frac{22}{3}^6, 8^1, \frac{26}{3}^{15}, 10^2, 16^1, \infty^{50}$
14	$1^1, 3^3, 7^2$	$1^1, 3^3, 7^7, \frac{31}{4}^4, 8^1, 9^1, \infty^{23}$	$0^1, 1^2, 3^8, 4^4, 7^{11}, \frac{31}{4}^4, 8^2, 9^1, 16^1, \infty^6$	$0^1, 1^2, 3^8, 4^4, 7^{16}, \frac{31}{4}^8, 8^3, 9^2, \frac{28}{3}^{18}, 16^1, \infty^{57}$
15	$\frac{3}{2}^2, \frac{7}{2}^2, 4^1, 8^1$	$\frac{3}{2}^2, \frac{7}{2}^2, 4^1, \frac{15}{2}^6, 8^4, \frac{17}{2}^2, \frac{19}{2}^2, \infty^{26}$	$0^1, \frac{3}{2}^4, 2^1, \frac{7}{2}^4, 4^3, \frac{14}{3}^6, \frac{15}{2}^6, 8^8, \frac{17}{2}^2, \frac{19}{2}^2, 16^2, \infty^6$	$0^1, \frac{3}{2}^4, 2^1, \frac{7}{2}^4, 4^3, \frac{14}{3}^6, \frac{15}{2}^{12}, 8^{11}, \frac{17}{2}^4, \frac{19}{2}^4, 10^{19}, 16^2, \infty^{65}$

16	1^1, 2^1, 4^3, 5^1, 9^1	1^1, 2^1, 4^3, 5^1, 8^5, $\frac{26}{3}^6$, 9^2, 10^3, ∞^{29}	0^1, 1^2, 2^2, $\frac{8}{3}^3$, 4^6, 5^2, $\frac{16}{3}^6$, 8^6, $\frac{26}{3}^6$, 9^5, 10^3, 16^2, ∞^7	0^1, 1^2, 2^2, $\frac{8}{3}^3$, 4^6, 5^2, $\frac{16}{3}^6$, 8^{11}, $\frac{26}{3}^{12}$, 9^6, 10^6, $\frac{32}{3}^{21}$, 16^2, ∞^{73}
17	2^1, 4^1, $\frac{9}{2}^2$, 5^2, 8^1, 10^1	2^1, 4^1, $\frac{9}{2}^2$, 5^2, 8^1, $\frac{17}{2}^6$, 9^2, $\frac{28}{3}^6$, 10^2, $\frac{21}{2}^2$, ∞^{32}	0^1, 2^3, $\frac{10}{3}^3$, 4^2, $\frac{9}{2}^4$, 5^4, 6^7, 8^3, $\frac{17}{2}^6$, 9^2, $\frac{28}{3}^6$, 10^4, $\frac{21}{2}^2$, 16^2, ∞^8	0^1, 2^3, $\frac{10}{3}^3$, 4^2, $\frac{9}{2}^4$, 5^4, 6^7, 8^3, $\frac{17}{2}^{12}$, 9^4, $\frac{28}{3}^{12}$, 10^5, $\frac{21}{2}^4$, $\frac{34}{3}^{24}$, 16^2, ∞^{81}
18	1^1, 3^1, 4^1, 5^1, $\frac{23}{4}^4$, 8^1	1^1, 3^1, 4^1, 5^1, $\frac{23}{4}^4$, 8^1, 9^7, $\frac{39}{4}^4$, 10^2, $\frac{41}{4}^4$, 11^1, ∞^{36}	0^1, 1^2, 3^4, 4^3, 5^4, $\frac{23}{4}^8$, $\frac{20}{3}^6$, 8^2, 9^9, $\frac{39}{4}^4$, 10^2, $\frac{41}{4}^4$, 11^3, 16^2, ∞^9	0^1, 1^2, 3^4, 4^3, 5^4, $\frac{23}{4}^8$, $\frac{20}{3}^6$, 8^2, 9^{16}, $\frac{39}{4}^8$, 10^4, $\frac{41}{4}^8$, 11^4, 12^{28}, 16^2, ∞^{90}
19	$\frac{3}{2}^2$, 4^2, $\frac{11}{2}^2$, 6^1, $\frac{13}{2}^2$, 8^1	$\frac{3}{2}^2$, 4^2, $\frac{11}{2}^2$, 6^1, $\frac{13}{2}^2$, 8^1, $\frac{19}{2}^6$, 10^3, $\frac{21}{2}^2$, $\frac{87}{8}^8$, 12^1, ∞^{40}	0^1, $\frac{3}{2}^4$, 2^1, 4^5, $\frac{11}{2}^8$, 6^2, $\frac{13}{2}^4$, $\frac{22}{3}^6$, 8^2, $\frac{19}{2}^{10}$, 10^3, $\frac{21}{2}^2$, $\frac{87}{8}^8$, 12^2, 16^1, 18^1, ∞^{10}	0^1, $\frac{3}{2}^4$, 2^1, 4^5, $\frac{11}{2}^8$, 6^2, $\frac{13}{2}^4$, $\frac{22}{3}^6$, 8^2, $\frac{19}{2}^{16}$, 10^6, $\frac{21}{2}^4$, $\frac{87}{8}^{16}$, 12^3, $\frac{38}{3}^{30}$, 16^1, 18^1, ∞^{100}
20	1^1, 2^1, 5^2, 6^1, $\frac{20}{3}^3$, 8^1, 9^2	1^1, 2^1, 5^2, 6^1, $\frac{20}{3}^3$, 8^1, 9^2, 10^7, $\frac{32}{3}^3$, 11^2, $\frac{45}{4}^4$, $\frac{23}{2}^4$, 13^1, 17^1, ∞^{44}	0^1, 1^2, 2^2, $\frac{8}{3}^3$, 5^6, 6^4, $\frac{20}{3}^6$, 8^9, 9^6, 10^9, $\frac{32}{3}^3$, 11^2, $\frac{45}{4}^4$, $\frac{23}{2}^4$, 13^1, 16^1, 17^1, 20^1, 32^1, ∞^{11}	0^1, 1^2, 2^2, $\frac{8}{3}^3$, 5^6, 6^4, $\frac{20}{3}^6$, 8^9, 9^6, 10^{16}, $\frac{32}{3}^6$, 11^4, $\frac{45}{4}^8$, $\frac{23}{2}^8$, 13^2, $\frac{40}{3}^{33}$, 16^1, 17^2, 20^1, 32^1, ∞^{110}
21	2^1, $\frac{5}{2}^2$, 6^2, $\frac{22}{3}^3$, 8^1, 10^3	2^1, $\frac{5}{2}^2$, 6^2, $\frac{22}{3}^3$, 8^1, 10^3, $\frac{21}{2}^8$, 11^4, $\frac{34}{3}^3$, 12^6, $\frac{25}{2}^2$, 18^1, ∞^{48}	0^1, 2^3, $\frac{5}{2}^4$, $\frac{10}{3}^3$, 6^7, $\frac{22}{3}^6$, 8^3, $\frac{26}{3}^6$, 10^8, $\frac{21}{2}^{12}$, 11^4, $\frac{34}{3}^3$, 12^6, $\frac{25}{2}^2$, 16^1, 18^2, 32^1, ∞^{12}	0^1, 2^3, $\frac{5}{2}^4$, $\frac{10}{3}^3$, 6^7, $\frac{22}{3}^6$, 8^3, $\frac{26}{3}^6$, 10^8, $\frac{21}{2}^{20}$, 11^8, $\frac{34}{3}^6$, 12^{12}, $\frac{25}{2}^4$, 14^{37}, 16^1, 18^3, 32^1, ∞^{120}
22	1^1, 3^3, 7^3, 8^2, 9^2, 11^2	1^1, 3^3, 7^3, 8^2, 9^2, 11^9, $\frac{47}{4}^8$, 12^4, $\frac{51}{4}^4$, 13^2, 17^1, ∞^{53}	0^1, 1^2, 3^8, 4^4, 7^8, 8^5, 9^6, $\frac{28}{3}^6$, 11^{17}, $\frac{47}{4}^8$, 12^4, $\frac{51}{4}^4$, 13^2, 17^1, 19^2, 32^1, ∞^{13}	0^1, 1^2, 3^8, 4^4, 7^8, 8^5, 9^6, $\frac{28}{3}^6$, 11^{24}, $\frac{47}{4}^{16}$, 12^8, $\frac{51}{4}^8$, 13^4, $\frac{44}{3}^{39}$, 17^2, 19^2, 32^1, ∞^{132}
23	$\frac{3}{2}^2$, $\frac{7}{2}^2$, 4^1, 8^3, $\frac{19}{4}^4$, 10^1, 12^1	$\frac{3}{2}^2$, $\frac{7}{2}^2$, 4^1, 8^3, $\frac{19}{4}^4$, 10^1, $\frac{23}{2}^8$, 12^4, $\frac{25}{4}^2$, $\frac{38}{3}^6$, $\frac{27}{2}^6$, $\frac{35}{2}^2$, ∞^{57}	0^1, $\frac{3}{2}^4$, 2^1, $\frac{7}{2}^4$, 4^3, $\frac{14}{3}^6$, 8^9, $\frac{19}{2}^{12}$, 10^6, $\frac{23}{2}^{12}$, 12^7, $\frac{25}{2}^4$, $\frac{38}{3}^6$, $\frac{27}{2}^6$, $\frac{35}{2}^2$, 20^1, 32^2, ∞^{14}	0^1, $\frac{3}{2}^4$, 2^1, $\frac{7}{2}^4$, 4^3, $\frac{14}{3}^6$, 8^9, $\frac{19}{2}^{12}$, 10^6, $\frac{23}{2}^{20}$, 12^{10}, $\frac{25}{2}^8$, $\frac{38}{3}^{12}$, $\frac{27}{2}^{12}$, $\frac{46}{3}^{42}$, $\frac{35}{2}^4$, 20^1, 32^2, ∞^{143}
24	1^1, 2^1, 4^3, 5^1, 9^3, 10^2, $\frac{32}{3}^3$, 16^1	1^1, 2^1, 4^3, 5^1, 9^3, 10^2, $\frac{32}{3}^3$, 12^9, $\frac{38}{3}^6$, 13^1, $\frac{40}{3}^6$, 14^4, $\frac{57}{4}^4$, 16^1, 17^1, 18^1, ∞^{61}	0^1, 1^2, 2^2, $\frac{8}{3}^3$, 4^6, 5^2, $\frac{16}{3}^6$, 8^1, 9^{10}, 10^6, $\frac{32}{3}^9$, 12^{15}, $\frac{38}{3}^6$, 13^3, $\frac{40}{3}^6$, 14^4, $\frac{57}{4}^4$, 16^2, 17^1, 18^1, 24^1, 32^2, ∞^{15}	0^1, 1^2, 2^2, $\frac{8}{3}^3$, 4^6, 5^2, $\frac{16}{3}^6$, 8^1, 9^{10}, 10^6, $\frac{32}{3}^9$, 12^{24}, $\frac{38}{3}^{12}$, 13^4, $\frac{40}{3}^{12}$, 14^8, $\frac{57}{4}^8$, 16^{48}, 17^2, 18^2, 24^1, 32^2, ∞^{154}

25	2^1, 4^1, $\frac{9}{2}^4$, 5^2, 10^4, $\frac{34}{3}^3$, 12^1, 16^1	2^1, 4^1, $\frac{9}{2}^4$, 5^2, 10^4, $\frac{34}{3}^3$, 12^1, $\frac{25}{2}^8$, 13^4, $\frac{40}{3}^6$, 14^7, $\frac{29}{2}^4$, 15^2, 16^1, 18^1, 20^1, ∞^{67}	0^1, 2^3, $\frac{10}{3}^3$, 4^2, $\frac{9}{2}^8$, 5^4, 6^7, 8^1, 10^{11}, $\frac{34}{3}^9$, 12^4, $\frac{25}{2}^{12}$, 13^8, $\frac{40}{3}^6$, 14^7, $\frac{29}{2}^4$, 15^2, 16^3, 18^1, 20^1, 24^1, 32^2, ∞^{17}	0^1, 2^3, $\frac{10}{3}^3$, 4^2, $\frac{9}{2}^8$, 5^4, 6^7, 8^1, 10^{11}, $\frac{34}{3}^9$, 12^4, $\frac{25}{2}^{20}$, 13^{12}, $\frac{40}{3}^{12}$, 14^{14}, $\frac{29}{2}^8$, 15^4, 16^3, $\frac{50}{3}^{51}$, 18^2, 20^2, 24^1, 32^2, ∞^{167}
26	1^1, 3^1, 4^1, 5^3, $\frac{23}{4}^4$, 11^4, 12^2, 13^2	1^1, 3^1, 4^1, 5^3, $\frac{23}{4}^4$, 11^4, 12^2, 13^{11}, $\frac{55}{4}^8$, 14^2, $\frac{57}{4}^4$, $\frac{44}{3}^6$, $\frac{63}{4}^4$, 17^1, 19^1, 20^1, ∞^{72}	0^1, 1^2, 3^4, 4^3, 5^8, $\frac{23}{4}^8$, $\frac{20}{3}^9$, 11^{12}, 12^7, 13^{15}, $\frac{55}{4}^{16}$, 14^2, $\frac{57}{4}^4$, $\frac{44}{3}^6$, $\frac{63}{4}^4$, 16^1, 17^1, 19^1, 20^1, 32^3, ∞^{18}	0^1, 1^2, 3^4, 4^3, 5^8, $\frac{23}{4}^8$, $\frac{20}{3}^9$, 11^{12}, 12^7, 13^{24}, $\frac{55}{4}^{24}$, 14^4, $\frac{57}{4}^8$, $\frac{44}{3}^{12}$, $\frac{63}{4}^8$, 16^1, 17^2, $\frac{52}{3}^{54}$, 19^2, 20^2, 32^3, ∞^{180}
27	$\frac{3}{2}^2$, 4^2, $\frac{11}{2}^4$, 6^1, $\frac{13}{2}^2$, 12^4, $\frac{27}{2}^4$	$\frac{3}{2}^2$, 4^2, $\frac{11}{2}^4$, 6^1, $\frac{13}{2}^2$, 12^4, $\frac{27}{2}^{14}$, 14^5, $\frac{29}{2}^4$, $\frac{119}{8}^8$, $\frac{46}{3}^6$, $\frac{33}{2}^2$, $\frac{35}{2}^2$, 20^2, ∞^{77}	0^1, $\frac{3}{2}^4$, 2^1, 4^5, $\frac{11}{2}^{12}$, 6^2, $\frac{13}{2}^4$, $\frac{22}{3}^{12}$, 12^{13}, $\frac{27}{2}^{22}$, 14^7, $\frac{29}{2}^8$, $\frac{119}{8}^8$, $\frac{46}{3}^6$, 16^1, $\frac{33}{2}^2$, $\frac{35}{2}^2$, 20^2, 32^3, 34^1, ∞^{19}	0^1, $\frac{3}{2}^4$, 2^1, 4^5, $\frac{11}{2}^{12}$, 6^2, $\frac{13}{2}^4$, $\frac{22}{3}^{12}$, 12^{13}, $\frac{27}{2}^{32}$, 14^{12}, $\frac{29}{2}^{12}$, $\frac{119}{8}^{16}$, $\frac{46}{3}^{12}$, 16^1, $\frac{33}{2}^4$, $\frac{35}{2}^4$, 18^{58}, 20^4, 32^3, 34^1, ∞^{193}
28	1^1, 2^1, 5^2, 6^5, $\frac{20}{3}^3$, 9^1, 13^5, 14^2, 17^1	1^1, 2^1, 5^2, 6^5, $\frac{20}{3}^3$, 9^1, 13^5, 14^{11}, $\frac{44}{3}^9$, 15^2, $\frac{61}{4}^4$, $\frac{31}{2}^4$, 16^7, 17^2, 18^3, 21^2, ∞^{83}	0^1, 1^2, 2^2, $\frac{8}{3}^3$, 5^6, 6^{12}, $\frac{20}{3}^6$, 8^{13}, 9^2, 13^{14}, 14^{15}, $\frac{44}{3}^{15}$, 15^2, $\frac{61}{4}^4$, $\frac{31}{2}^4$, 16^9, 17^5, 18^3, 21^2, 32^3, 36^1, ∞^{21}	0^1, 1^2, 2^2, $\frac{8}{3}^3$, 5^6, 6^{12}, $\frac{20}{3}^6$, 8^{13}, 9^2, 13^{14}, 14^{24}, $\frac{44}{3}^{24}$, 15^4, $\frac{61}{4}^8$, $\frac{31}{2}^8$, 16^{16}, 17^6, 18^6, $\frac{56}{3}^{63}$, 21^4, 32^3, 36^1, ∞^{207}
29	2^1, $\frac{5}{2}^2$, 6^2, $\frac{13}{2}^4$, 7^2, $\frac{22}{3}^3$, 10^1, 14^5, 16^1, 18^1	2^1, $\frac{5}{2}^2$, 6^2, $\frac{13}{2}^4$, 7^2, $\frac{22}{3}^3$, 10^1, 14^5, $\frac{29}{2}^{10}$, 15^4, $\frac{46}{3}^9$, 16^7, $\frac{33}{2}^2$, $\frac{50}{3}^6$, 18^2, $\frac{37}{2}^4$, 22^2, ∞^{89}	0^1, 2^3, $\frac{5}{2}^4$, $\frac{10}{3}^3$, 6^7, $\frac{13}{2}^8$, 7^4, $\frac{22}{3}^6$, 8^1, $\frac{26}{3}^{15}$, 10^2, 14^{15}, $\frac{29}{2}^{10}$, 15^4, $\frac{46}{3}^{15}$, 16^{10}, $\frac{33}{2}^2$, $\frac{50}{3}^6$, 18^6, $\frac{37}{2}^4$, 22^2, 32^4, 34^1, ∞^{22}	0^1, 2^3, $\frac{5}{2}^4$, $\frac{10}{3}^3$, 6^7, $\frac{13}{2}^8$, 7^4, $\frac{22}{3}^6$, 8^1, $\frac{26}{3}^{15}$, 10^2, 14^{15}, $\frac{29}{2}^{20}$, 15^8, $\frac{46}{3}^{24}$, 16^{16}, $\frac{33}{2}^4$, $\frac{50}{3}^{12}$, 18^7, $\frac{37}{2}^8$, $\frac{58}{3}^{66}$, 22^4, 32^4, 34^1, ∞^{222}
30	1^1, 3^3, 7^7, $\frac{31}{4}^4$, 8^1, 9^1, 15^4, 16^1, 17^1	1^1, 3^3, 7^7, $\frac{31}{4}^4$, 8^1, 9^1, 15^{15}, $\frac{63}{4}^8$, 16^{10}, $\frac{67}{4}^4$, 17^4, $\frac{52}{3}^6$, 19^5, 23^2, ∞^{94}	0^1, 1^2, 3^8, 4^4, 7^{16}, $\frac{31}{4}^8$, 8^3, 9^2, $\frac{28}{3}^{18}$, 15^{25}, $\frac{63}{4}^8$, 16^{15}, $\frac{67}{4}^4$, 17^7, $\frac{52}{3}^6$, 19^7, 23^2, 32^4, 35^2, ∞^{23}	0^1, 1^2, 3^8, 4^4, 7^{16}, $\frac{31}{4}^8$, 8^3, 9^2, $\frac{28}{3}^{18}$, 15^{36}, $\frac{63}{4}^{16}$, 16^{24}, $\frac{67}{4}^8$, 17^{10}, $\frac{52}{3}^{12}$, 19^{12}, 20^{70}, 23^4, 32^4, 35^2, ∞^{236}
31	$\frac{3}{2}^2$, $\frac{7}{2}^2$, 4^1, $\frac{15}{2}^6$, 8^4, $\frac{17}{2}^2$, $\frac{19}{2}^2$, 16^4, $\frac{35}{2}^2$	$\frac{3}{2}^2$, $\frac{7}{2}^2$, 4^1, $\frac{15}{2}^6$, 8^4, $\frac{17}{2}^2$, $\frac{19}{2}^2$, $\frac{31}{2}^{10}$, 16^9, $\frac{33}{2}^4$, $\frac{50}{3}^{12}$, $\frac{35}{2}^{10}$, 18^4, $\frac{39}{2}^6$, 20^1, 24^1, ∞^{100}	0^1, $\frac{3}{2}^4$, 2^1, $\frac{7}{2}^4$, 4^3, $\frac{14}{3}^6$, $\frac{15}{2}^{12}$, 8^{11}, $\frac{17}{2}^4$, $\frac{19}{2}^4$, 10^{19}, $\frac{31}{2}^{10}$, 16^{20}, $\frac{33}{2}^4$, $\frac{50}{3}^{12}$, $\frac{35}{2}^{16}$, 18^5, $\frac{39}{2}^6$, 20^2, 24^1, 32^4, 34^1, 36^1, ∞^{25}	0^1, $\frac{3}{2}^4$, 2^1, $\frac{7}{2}^4$, 4^3, $\frac{14}{3}^6$, $\frac{15}{2}^{12}$, 8^{11}, $\frac{17}{2}^4$, $\frac{19}{2}^4$, 10^{19}, $\frac{31}{2}^{20}$, 16^{25}, $\frac{33}{2}^8$, $\frac{50}{3}^{24}$, $\frac{35}{2}^{24}$, 18^9, $\frac{39}{2}^{12}$, 20^3, $\frac{62}{3}^{75}$, 24^2, 32^4, 34^1, 36^1, ∞^{251}

32	1^1, 2^1, 4^3, 5^1, 8^5, $\frac{26}{3}^6$, 9^2, 10^3, 17^4, 18^1	1^1, 2^1, 4^3, 5^1, 8^5, $\frac{26}{3}^6$, 9^2, 10^3, 16^{11}, $\frac{50}{3}^6$, 17^7, $\frac{52}{3}^{12}$, 18^6, $\frac{73}{4}^4$, $\frac{56}{3}^3$, 20^7, 21^1, 25^1, ∞^{107}	0^1, 1^2, 2^2, $\frac{8}{3}^3$, 4^6, 5^2, $\frac{16}{3}^6$, 8^{11}, $\frac{26}{3}^{12}$, 9^6, 10^6, $\frac{32}{3}^{21}$, 16^{13}, $\frac{50}{3}^6$, 17^{15}, $\frac{52}{3}^{12}$, 18^9, $\frac{73}{4}^4$, $\frac{56}{3}^6$, 20^7, 21^1, 24^1, 25^1, 32^5, 36^1, 40^1, ∞^{27}	0^1, 1^2, 2^2, $\frac{8}{3}^3$, 4^6, 5^2, $\frac{16}{3}^6$, 8^{11}, $\frac{26}{3}^{12}$, 9^6, 10^6, $\frac{32}{3}^{21}$, 16^{24}, $\frac{50}{3}^{12}$, 17^{18}, $\frac{52}{3}^{24}$, 18^{14}, $\frac{73}{4}^8$, $\frac{56}{3}^9$, 20^{14}, 21^2, $\frac{64}{3}^{81}$, 24^1, 25^2, 32^5, 36^1, 40^1, ∞^{267}
33	2^1, 4^1, $\frac{9}{2}^2$, 5^2, 8^1, $\frac{17}{2}^4$, 9^2, $\frac{28}{3}^6$, 10^2, $\frac{21}{2}^2$, 16^1, 18^3, 20^1	2^1, 4^1, $\frac{9}{2}^2$, 5^2, 8^1, $\frac{17}{2}^4$, 9^2, $\frac{28}{3}^6$, 10^2, $\frac{21}{2}^2$, 16^1, $\frac{33}{2}^{12}$, 17^6, $\frac{52}{3}^6$, 18^{18}, $\frac{37}{2}^4$, 19^2, $\frac{58}{3}^3$, 20^1, $\frac{41}{2}^6$, 21^2, 26^1, ∞^{113}	0^1, 2^3, $\frac{10}{3}^3$, 4^2, $\frac{9}{2}^4$, 5^4, 6^7, 8^3, $\frac{17}{2}^8$, 9^4, $\frac{28}{3}^{12}$, 10^5, $\frac{21}{2}^4$, $\frac{34}{3}^{24}$, 16^4, $\frac{33}{2}^{12}$, 17^6, $\frac{52}{3}^6$, 18^{26}, $\frac{37}{2}^4$, 19^2, $\frac{58}{3}^6$, 20^2, $\frac{41}{2}^6$, 21^2, 24^1, 26^1, 32^5, 34^2, 40^1, ∞^{28}	0^1, 2^3, $\frac{10}{3}^3$, 4^2, $\frac{9}{2}^4$, 5^4, 6^7, 8^3, $\frac{17}{2}^8$, 9^4, $\frac{28}{3}^{12}$, 10^5, $\frac{21}{2}^4$, $\frac{34}{3}^{24}$, 16^4, $\frac{33}{2}^{24}$, 17^{12}, $\frac{52}{3}^{12}$, 18^{41}, $\frac{37}{2}^8$, 19^4, $\frac{58}{3}^9$, 20^2, $\frac{41}{2}^{12}$, 21^4, 22^{85}, 24^1, 26^2, 32^5, 34^2, 40^1, ∞^{283}
34	1^1, 3^1, 4^1, 5^1, $\frac{23}{4}^4$, 8^1, 9^5, $\frac{39}{4}^4$, 10^2, $\frac{41}{4}^4$, 11^1, 16^1, 19^3, 20^1	1^1, 3^1, 4^1, 5^1, $\frac{23}{4}^4$, 8^1, 9^5, $\frac{39}{4}^4$, 10^2, $\frac{41}{4}^4$, 11^1, 16^1, 17^{11}, $\frac{71}{4}^{12}$, 18^2, $\frac{73}{4}^4$, $\frac{56}{3}^{12}$, 19^4, $\frac{77}{4}^4$, $\frac{79}{4}^4$, 20^2, 21^5, $\frac{87}{4}^4$, ∞^{120}	0^1, 1^2, 3^4, 4^3, 5^4, $\frac{23}{4}^8$, $\frac{20}{3}^6$, 8^2, 9^{12}, $\frac{39}{4}^8$, 10^4, $\frac{41}{4}^8$, 11^4, 12^{25}, 16^4, 17^{13}, $\frac{71}{4}^{12}$, 18^2, $\frac{73}{4}^4$, $\frac{56}{3}^{12}$, 19^{11}, $\frac{77}{4}^4$, $\frac{79}{4}^4$, 20^4, 21^7, $\frac{87}{4}^4$, 32^4, 35^4, ∞^{30}	0^1, 1^2, 3^4, 4^3, 5^4, $\frac{23}{4}^8$, $\frac{20}{3}^6$, 8^2, 9^{12}, $\frac{39}{4}^8$, 10^4, $\frac{41}{4}^8$, 11^4, 12^{25}, 16^4, 17^{24}, $\frac{71}{4}^{24}$, 18^4, $\frac{73}{4}^8$, $\frac{56}{3}^{24}$, 19^{12}, $\frac{77}{4}^8$, $\frac{79}{4}^8$, 20^5, 21^{12}, $\frac{87}{4}^8$, $\frac{68}{3}^{90}$, 32^4, 35^4, ∞^{300}
35	$\frac{3}{2}^2$, 4^2, $\frac{11}{2}^2$, 6^1, $\frac{13}{2}^2$, 8^1, $\frac{19}{2}^4$, 10^3, $\frac{21}{2}^2$, $\frac{87}{8}^8$, 12^1, 16^1, 20^3	$\frac{3}{2}^2$, 4^2, $\frac{11}{2}^2$, 6^1, $\frac{13}{2}^2$, 8^1, $\frac{19}{2}^4$, 10^3, $\frac{21}{2}^2$, $\frac{87}{8}^8$, 12^1, 16^1, $\frac{35}{2}^{12}$, 18^5, $\frac{37}{2}^6$, $\frac{151}{8}^8$, $\frac{58}{3}^{12}$, $\frac{159}{8}^8$, 20^4, $\frac{41}{2}^2$, $\frac{43}{2}^2$, 22^3, $\frac{45}{2}^2$, ∞^{127}	0^1, $\frac{3}{2}^4$, 2^1, 4^5, $\frac{11}{2}^8$, 6^2, $\frac{13}{2}^4$, $\frac{22}{3}^6$, 8^2, $\frac{19}{2}^{12}$, 10^6, $\frac{21}{2}^4$, $\frac{87}{8}^{16}$, 12^3, $\frac{38}{3}^{24}$, 16^3, $\frac{35}{2}^{16}$, 18^6, $\frac{37}{2}^6$, $\frac{151}{8}^8$, $\frac{58}{3}^{12}$, $\frac{159}{8}^8$, 20^{10}, $\frac{41}{2}^2$, $\frac{43}{2}^8$, 22^3, $\frac{45}{2}^2$, 32^4, 34^2, 36^2, ∞^{32}	0^1, $\frac{3}{2}^4$, 2^1, 4^5, $\frac{11}{2}^8$, 6^2, $\frac{13}{2}^4$, $\frac{22}{3}^6$, 8^2, $\frac{19}{2}^{12}$, 10^6, $\frac{21}{2}^4$, $\frac{87}{8}^{16}$, 12^3, $\frac{38}{3}^{24}$, 16^3, $\frac{35}{2}^{28}$, 18^{11}, $\frac{37}{2}^{12}$, $\frac{151}{8}^{16}$, $\frac{58}{3}^{24}$, $\frac{159}{8}^{16}$, 20^{11}, $\frac{41}{2}^4$, $\frac{43}{2}^{12}$, 22^6, $\frac{45}{2}^4$, $\frac{70}{3}^{96}$, 32^4, 34^2, 36^2, ∞^{317}

36	1^1, 2^1, 5^2, 6^1, $\frac{20}{3}^3$, 8^1, 9^2, 10^3, $\frac{32}{3}^3$, 11^2, $\frac{45}{4}^4$, $\frac{23}{2}^4$, 13^1, 16^1, 17^2, 21^2	$1^1, 2^1, 5^2, 6^1, \frac{20}{3}^3, 8^1, 9^2, 10^3, \frac{32}{3}^3, 11^2, \frac{45}{4}^4, \frac{23}{2}^4, 13^1, 16^1, 17^2, 18^{13}, \frac{56}{3}^9, 19^2, \frac{77}{4}^4, \frac{39}{2}^4, 20^{14}, \frac{81}{4}^4, \frac{41}{2}^4, 21^5, 22^3, \frac{68}{3}^3, 23^2, 25^1, 33^1, \infty^{134}$	$0^1, 1^2, 2^2, \frac{8}{3}^3, 5^6, 6^4, \frac{20}{3}^6, 8^9, 9^6, 10^8, \frac{32}{3}^6, 11^4, \frac{45}{4}^8, \frac{23}{2}^8, 13^2, \frac{40}{3}^{27}, 16^3, 17^6, 18^{15}, \frac{56}{3}^9, 19^2, \frac{77}{4}^4, \frac{39}{2}^4, 20^{15}, \frac{81}{4}^4, \frac{41}{2}^4, 21^{11}, 22^5, \frac{68}{3}^3, 23^2, 25^1, 32^4, 33^1, \frac{104}{3}^3, 36^1, 44^1, 64^1, \infty^{33}$	$0^1, 1^2, 2^2, \frac{8}{3}^3, 5^6, 6^4, \frac{20}{3}^6, 8^9, 9^6, 10^8, \frac{32}{3}^6, 11^4, \frac{45}{4}^8, \frac{23}{2}^8, 13^2, \frac{40}{3}^{27}, 16^3, 17^6, 18^{28}, \frac{56}{3}^{18}, 19^4, \frac{77}{4}^8, \frac{39}{2}^8, 20^{29}, \frac{81}{4}^8, \frac{41}{2}^8, 21^{14}, 22^8, \frac{68}{3}^6, 23^4, 24^{100}, 25^2, 32^4, 33^2, \frac{104}{3}^3, 36^1, 44^1, 64^1, \infty^{335}$
37	2^1, $\frac{5}{2}^2$, 6^2, $\frac{22}{3}^3$, 8^1, 10^3, $\frac{21}{2}^4$, 11^2, $\frac{34}{3}^3$, 12^6, $\frac{25}{2}^2$, 16^1, 18^3, 22^2	$2^1, \frac{5}{2}^2, 6^2, \frac{22}{3}^3, 8^1, 10^3, \frac{21}{2}^4, 11^2, \frac{34}{3}^3, 12^6, \frac{25}{2}^2, 16^1, 18^3, \frac{37}{2}^{12}, 19^6, \frac{58}{3}^9, 20^6, \frac{41}{2}^2, \frac{62}{3}^{12}, 21^4, \frac{169}{8}^8, 22^5, \frac{45}{2}^2, 23^2, \frac{70}{3}^3, 26^1, 34^1, \infty^{141}$	$0^1, 2^3, \frac{5}{2}^4, \frac{10}{3}^3, 6^7, \frac{22}{3}^6, 8^3, \frac{26}{3}^6, 10^8, \frac{21}{2}^{12}, 11^4, \frac{34}{3}^6, 12^{12}, \frac{25}{2}^4, 14^{28}, 16^3, 18^9, \frac{37}{2}^{16}, 19^6, \frac{58}{3}^9, 20^6, \frac{41}{2}^2, \frac{62}{3}^{12}, 21^4, \frac{169}{8}^8, 22^{10}, \frac{45}{2}^2, 23^2, \frac{70}{3}^3, 24^1, 26^1, 32^3, 34^3, \frac{106}{3}^3, 46^1, 64^1, \infty^{35}$	$0^1, 2^3, \frac{5}{2}^4, \frac{10}{3}^3, 6^7, \frac{22}{3}^6, 8^3, \frac{26}{3}^6, 10^8, \frac{21}{2}^{12}, 11^4, \frac{34}{3}^6, 12^{12}, \frac{25}{2}^4, 14^{28}, 16^3, 18^9, \frac{37}{2}^{28}, 19^{12}, \frac{58}{3}^{18}, 20^{12}, \frac{41}{2}^4, \frac{62}{3}^{24}, 21^8, \frac{169}{8}^{16}, 22^{13}, \frac{45}{2}^4, 23^4, \frac{70}{3}^6, 24^1, \frac{74}{3}^{105}, 26^2, 32^3, 34^4, \frac{106}{3}^3, 46^1, 64^1, \infty^{353}$
38	1^1, 3^3, 7^3, 8^2, 9^2, 11^5, $\frac{47}{4}^4$, 12^4, $\frac{51}{4}^4$, 13^2, 16^1, 17^2, 19^2, 23^2	$1^1, 3^3, 7^3, 8^2, 9^2, 11^5, \frac{47}{4}^4, 12^4, \frac{51}{4}^4, 13^2, 16^1, 17^2, 19^{15}, \frac{79}{4}^{12}, 20^6, \frac{83}{4}^4, 21^4, \frac{85}{4}^4, \frac{64}{3}^{12}, \frac{87}{4}^{12}, 23^3, \frac{95}{4}^4, 24^1, 25^1, 33^1, \infty^{148}$	$0^1, 1^2, 3^8, 4^4, 7^8, 8^5, 9^6, \frac{28}{3}^6, 11^{16}, \frac{47}{4}^8, 12^8, \frac{51}{4}^8, 13^4, \frac{44}{3}^{27}, 16^2, 17^6, 19^{25}, \frac{79}{4}^{12}, 20^6, \frac{83}{4}^4, 21^4, \frac{85}{4}^4, \frac{64}{3}^{12}, \frac{87}{4}^{12}, 23^7, \frac{95}{4}^4, 24^2, 25^1, 32^3, 33^1, 35^4, 36^1, 40^1, 64^1, \infty^{37}$	$0^1, 1^2, 3^8, 4^4, 7^8, 8^5, 9^6, \frac{28}{3}^6, 11^{16}, \frac{47}{4}^8, 12^8, \frac{51}{4}^8, 13^4, \frac{44}{3}^{27}, 16^2, 17^6, 19^{38}, \frac{79}{4}^{24}, 20^{12}, \frac{83}{4}^8, 21^8, \frac{85}{4}^8, \frac{64}{3}^{24}, \frac{87}{4}^{24}, 23^8, \frac{95}{4}^8, 24^3, 25^2, \frac{76}{3}^{111}, 32^3, 33^2, 35^4, 36^1, 40^1, 64^1, \infty^{371}$
39	$\frac{3}{2}^2$, $\frac{7}{2}^2$, 4^1, 8^3, $\frac{19}{2}^4$, 10^1, $\frac{23}{2}^2$, 12^2, $\frac{25}{2}^2$, $\frac{38}{3}^6$, $\frac{27}{2}^6$, 16^1, $\frac{35}{2}^4$, 18^1, 20^1, 24^1	$\frac{3}{2}^2, \frac{7}{2}^2, 4^1, 8^3, \frac{19}{2}^4, 10^1, \frac{23}{2}^2, 12^2, \frac{25}{2}^2, \frac{38}{3}^6, \frac{27}{2}^6, 16^1, \frac{35}{2}^4, 18^1, \frac{39}{2}^{14}, 20^8, \frac{41}{2}^6, \frac{62}{3}^6, \frac{43}{2}^{10}, \frac{175}{8}^8, 22^8, \frac{179}{8}^8, \frac{45}{2}^4, 24^2, \frac{49}{2}^2, \frac{51}{2}^2, \frac{67}{2}^2, \infty^{156}$	$0^1, \frac{3}{2}^4, 2^1, \frac{7}{2}^4, 4^3, \frac{14}{3}^6, 8^9, \frac{19}{2}^{12}, 10^6, \frac{23}{2}^8, 12^6, \frac{25}{2}^4, \frac{38}{3}^{12}, \frac{27}{2}^{12}, \frac{46}{3}^{27}, 16^2, \frac{35}{2}^{12}, 18^2, \frac{39}{2}^{18}, 20^{12}, \frac{41}{2}^6, \frac{62}{3}^6, \frac{43}{2}^{10}, \frac{175}{8}^8, 22^8, \frac{179}{8}^8, \frac{45}{2}^4, 24^6, \frac{49}{2}^2, \frac{51}{2}^2, 32^3, \frac{67}{2}^2, 34^2, 36^2, 40^2, 64^2, \infty^{39}$	$0^1, \frac{3}{2}^4, 2^1, \frac{7}{2}^4, 4^3, \frac{14}{3}^6, 8^9, \frac{19}{2}^{12}, 10^6, \frac{23}{2}^8, 12^6, \frac{25}{2}^4, \frac{38}{3}^{12}, \frac{27}{2}^{12}, \frac{46}{3}^{27}, 16^2, \frac{35}{2}^{12}, 18^2, \frac{39}{2}^{32}, 20^{19}, \frac{41}{2}^{12}, \frac{62}{3}^{12}, \frac{43}{2}^{20}, \frac{175}{8}^{16}, 22^{16}, \frac{179}{8}^{16}, \frac{45}{2}^8, 24^7, \frac{49}{2}^4, \frac{51}{2}^4, 26^{118}, 32^3, \frac{67}{2}^4, 34^2, 36^2, 40^2, 64^2, \infty^{390}$

40	$1^1, 2^1, 4^3, 5^1, 9^3, 10^2, \frac{32}{3}^3, 12^3, 13^1, \frac{40}{3}^6, 14^2, \frac{57}{4}^4, 16^2, 17^2, 18^2, \frac{56}{3}^3, 24^1, 25^1$	$1^1, 2^1, 4^3, 5^1, 9^3, 10^2, \frac{32}{3}^3, 12^3, 13^1, \frac{40}{3}^6, 14^2, \frac{57}{4}^4, 16^2, 17^2, 18^2, \frac{56}{3}^3, 20^{13}, \frac{62}{3}^{12}, 21^3, \frac{64}{3}^6, 22^8, \frac{89}{4}^8, \frac{45}{2}^4, \frac{68}{3}^6, 23^{12}, \frac{93}{4}^4, 24^1, 25^2, 26^3, 33^1, 34^1, \infty^{164}$	$0^1, 1^2, 2^2, \frac{8}{3}^3, 4^6, 5^2, \frac{16}{3}^6, 8^1, 9^{10}, 10^6, \frac{32}{3}^9, 12^{12}, 13^4, \frac{40}{3}^{12}, 14^4, \frac{57}{4}^8, 16^{32}, 17^6, 18^6, \frac{56}{3}^6, 20^{19}, \frac{62}{3}^{12}, 21^5, \frac{64}{3}^6, 22^8, \frac{89}{4}^8, \frac{45}{2}^4, \frac{68}{3}^6, 23^{12}, \frac{93}{4}^4, 24^3, 25^5, 26^3, 32^2, 33^1, 34^1, \frac{104}{3}^3, 36^1, 40^3, 64^2, \infty^{41}$	$0^1, 1^2, 2^2, \frac{8}{3}^3, 4^6, 5^2, \frac{16}{3}^6, 8^1, 9^{10}, 10^6, \frac{32}{3}^9, 12^{12}, 13^4, \frac{40}{3}^{12}, 14^4, \frac{57}{4}^8, 16^{32}, 17^6, 18^6, \frac{56}{3}^6, 20^{32}, \frac{62}{3}^{24}, 21^8, \frac{64}{3}^{12}, 22^{16}, \frac{89}{4}^{16}, \frac{45}{2}^8, \frac{68}{3}^{12}, 23^{24}, \frac{93}{4}^8, 24^3, 25^6, 26^6, \frac{80}{3}^{123}, 32^2, 33^2, 34^2, \frac{104}{3}^3, 36^1, 40^3, 64^2, \infty^{410}$
41	$2^1, 4^1, \frac{9}{2}^4, 5^2, 10^4, \frac{34}{3}^3, 12^1, \frac{25}{2}^2, 13^2, 14^7, \frac{29}{2}^2, 15^2, 16^2, 18^3, \frac{58}{3}^3, 20^2, 24^1, 26^1$	$2^1, 4^1, \frac{9}{2}^4, 5^2, 10^4, \frac{34}{3}^3, 12^1, \frac{25}{2}^2, 13^2, 14^7, \frac{29}{2}^2, 15^2, 16^2, 18^3, \frac{58}{3}^3, 20^2, \frac{41}{2}^{14}, 21^6, \frac{64}{3}^{12}, 22^9, \frac{45}{2}^6, 23^6, \frac{70}{3}^6, \frac{47}{2}^4, \frac{189}{8}^8, \frac{95}{4}^8, 24^1, \frac{49}{2}^2, 26^2, \frac{53}{2}^2, 34^1, 36^1, \infty^{172}$	$0^1, 2^3, \frac{10}{3}^3, 4^2, \frac{9}{2}^8, 5^4, 6^7, 8^1, 10^{11}, \frac{34}{3}^9, 12^4, \frac{25}{2}^8, 13^8, 14^{14}, \frac{29}{2}^4, 15^4, 16^5, \frac{50}{3}^{27}, 18^8, \frac{58}{3}^6, 20^6, \frac{41}{2}^{22}, 21^{10}, \frac{64}{3}^{12}, 22^9, \frac{45}{2}^6, 23^6, \frac{70}{3}^6, \frac{47}{2}^4, \frac{189}{8}^8, \frac{95}{4}^8, 24^3, \frac{49}{2}^2, 26^4, \frac{53}{2}^2, 32^2, 34^2, \frac{106}{3}^3, 36^1, 38^1, 40^2, 64^2, \infty^{43}$	$0^1, 2^3, \frac{10}{3}^3, 4^2, \frac{9}{2}^8, 5^4, 6^7, 8^1, 10^{11}, \frac{34}{3}^9, 12^4, \frac{25}{2}^8, 13^8, 14^{14}, \frac{29}{2}^4, 15^4, 16^5, \frac{50}{3}^{27}, 18^8, \frac{58}{3}^6, 20^6, \frac{41}{2}^{36}, 21^{16}, \frac{64}{3}^{24}, 22^{18}, \frac{45}{2}^{12}, 23^{12}, \frac{70}{3}^{12}, \frac{47}{2}^8, \frac{189}{8}^{16}, \frac{95}{4}^{16}, 24^3, \frac{49}{2}^4, 26^5, \frac{53}{2}^4, \frac{82}{3}^{129}, 32^2, 34^3, \frac{106}{3}^3, 36^2, 38^1, 40^2, 64^2, \infty^{430}$
42	$1^1, 3^1, 4^1, 5^3, \frac{23}{4}^4, 11^4, 12^2, 13^3, \frac{55}{4}^4, \frac{44}{3}^6, \frac{63}{4}^4, 16^1, 17^2, 19^4, 20^3, 21^2$	$1^1, 3^1, 4^1, 5^3, \frac{23}{4}^4, 11^4, 12^2, 13^3, \frac{55}{4}^4, \frac{44}{3}^6, \frac{63}{4}^4, 16^1, 17^2, 19^4, 20^3, 21^{17}, \frac{87}{4}^{12}, 22^4, \frac{89}{4}^8, \frac{68}{3}^9, 23^2, \frac{95}{4}^8, 24^6, \frac{97}{4}^4, \frac{391}{16}^{16}, 25^2, 27^1, 33^1, 35^1, 36^1, \infty^{180}$	$0^1, 1^2, 3^4, 4^3, 5^8, \frac{23}{4}^8, \frac{20}{3}^9, 11^{12}, 12^7, 13^8, \frac{55}{4}^{16}, \frac{44}{3}^{12}, \frac{63}{4}^8, 16^3, 17^6, \frac{52}{3}^{24}, 19^{10}, 20^8, 21^{25}, \frac{87}{4}^{20}, 22^4, \frac{89}{4}^8, \frac{68}{3}^9, 23^2, \frac{95}{4}^8, 24^6, \frac{97}{4}^4, \frac{391}{16}^{16}, 25^2, 27^3, 32^2, 33^1, 35^3, 36^2, 37^2, 40^1, 64^3, \infty^{45}$	$0^1, 1^2, 3^4, 4^3, 5^8, \frac{23}{4}^8, \frac{20}{3}^9, 11^{12}, 12^7, 13^8, \frac{55}{4}^{16}, \frac{44}{3}^{12}, \frac{63}{4}^8, 16^3, 17^6, \frac{52}{3}^{24}, 19^{10}, 20^8, 21^{40}, \frac{87}{4}^{32}, 22^8, \frac{89}{4}^{16}, \frac{68}{3}^{18}, 23^4, \frac{95}{4}^{16}, 24^{12}, \frac{97}{4}^8, \frac{391}{16}^{32}, 25^4, 27^4, 28^{136}, 32^2, 33^2, 35^4, 36^3, 37^2, 40^1, 64^3, \infty^{450}$

43	$\frac{3}{2}^{2}$, 4^{2}, $\frac{11}{2}^{4}$, 6^{1}, $\frac{13}{2}^{2}$, 12^{4}, $\frac{27}{2}^{6}$, 14^{1}, $\frac{29}{2}^{2}$, $\frac{46}{3}^{6}$, 16^{1}, $\frac{33}{2}^{2}$, $\frac{35}{2}^{4}$, 18^{1}, 20^{5}, $\frac{43}{2}^{4}$	$\frac{3}{2}^{2}$, 4^{2}, $\frac{11}{2}^{4}$, 6^{1}, $\frac{13}{2}^{2}$, 12^{4}, $\frac{27}{2}^{6}$, 14^{1}, $\frac{29}{2}^{2}$, $\frac{46}{3}^{6}$, 16^{1}, $\frac{33}{2}^{2}$, $\frac{35}{2}^{4}$, 18^{1}, 20^{5}, $\frac{43}{2}^{18}$, 22^{7}, $\frac{45}{2}^{6}$, $\frac{183}{8}^{16}$, $\frac{70}{3}^{12}$, 24^{2}, $\frac{49}{2}^{10}$, $\frac{199}{8}^{8}$, 25^{4}, $\frac{201}{8}^{8}$, $\frac{51}{2}^{2}$, 28^{1}, $\frac{67}{2}^{2}$, 36^{2}, ∞^{189}	0^{1}, $\frac{3}{2}^{4}$, 2^{1}, 4^{5}, $\frac{11}{2}^{12}$, 6^{2}, $\frac{13}{2}^{4}$, $\frac{22}{3}^{12}$, 12^{13}, $\frac{27}{2}^{16}$, 14^{4}, $\frac{29}{2}^{8}$, $\frac{46}{3}^{12}$, 16^{3}, $\frac{33}{2}^{4}$, $\frac{35}{2}^{12}$, 18^{27}, 20^{14}, $\frac{43}{2}^{30}$, 22^{9}, $\frac{45}{2}^{10}$, $\frac{183}{8}^{16}$, $\frac{70}{3}^{12}$, 24^{2}, $\frac{49}{2}^{10}$, $\frac{199}{8}^{8}$, 25^{4}, $\frac{201}{8}^{8}$, $\frac{51}{2}^{2}$, 28^{2}, 32^{1}, $\frac{67}{2}^{2}$, 34^{1}, 36^{3}, $\frac{75}{2}^{4}$, 42^{1}, 64^{3}, 66^{1}, ∞^{47}	0^{1}, $\frac{3}{2}^{4}$, 2^{1}, 4^{5}, $\frac{11}{2}^{12}$, 6^{2}, $\frac{13}{2}^{4}$, $\frac{22}{3}^{12}$, 12^{13}, $\frac{27}{2}^{16}$, 14^{4}, $\frac{29}{2}^{8}$, $\frac{46}{3}^{12}$, 16^{3}, $\frac{33}{2}^{4}$, $\frac{35}{2}^{12}$, 18^{27}, 20^{14}, $\frac{43}{2}^{44}$, 22^{16}, $\frac{45}{2}^{16}$, $\frac{183}{8}^{32}$, $\frac{70}{3}^{24}$, 24^{4}, $\frac{49}{2}^{20}$, $\frac{199}{8}^{16}$, 25^{8}, $\frac{201}{8}^{16}$, $\frac{51}{2}^{4}$, 28^{3}, $\frac{86}{3}^{141}$, 32^{1}, $\frac{67}{2}^{4}$, 34^{1}, 36^{5}, $\frac{75}{2}^{4}$, 42^{1}, 64^{3}, 66^{1}, ∞^{472}
44	1^{1}, 2^{1}, 5^{2}, 6^{5}, $\frac{20}{3}^{3}$, 9^{1}, 13^{5}, 14^{3}, $\frac{44}{3}^{3}$, 16^{8}, 17^{3}, 18^{2}, $\frac{56}{3}^{3}$, 21^{6}, 22^{2}, 32^{1}	1^{1}, 2^{1}, 5^{2}, 6^{5}, $\frac{20}{3}^{3}$, 9^{1}, 13^{5}, 14^{3}, $\frac{44}{3}^{3}$, 16^{8}, 17^{3}, 18^{2}, $\frac{56}{3}^{3}$, 21^{6}, 22^{17}, $\frac{68}{3}^{9}$, 23^{4}, $\frac{93}{4}^{8}$, $\frac{47}{2}^{8}$, 24^{13}, 25^{3}, $\frac{101}{4}^{8}$, $\frac{51}{2}^{4}$, $\frac{77}{3}^{12}$, 26^{6}, $\frac{105}{4}^{4}$, 29^{1}, 32^{1}, 33^{1}, 34^{1}, 37^{2}, ∞^{197}	0^{1}, 1^{2}, 2^{2}, $\frac{8}{3}^{3}$, 5^{6}, 6^{12}, $\frac{20}{3}^{6}$, 8^{13}, 9^{2}, 13^{14}, 14^{8}, $\frac{44}{3}^{12}$, 16^{18}, 17^{10}, 18^{6}, $\frac{56}{3}^{30}$, 21^{16}, 22^{29}, $\frac{68}{3}^{15}$, 23^{4}, $\frac{93}{4}^{8}$, $\frac{47}{2}^{8}$, 24^{13}, 25^{5}, $\frac{101}{4}^{8}$, $\frac{51}{2}^{4}$, $\frac{77}{3}^{12}$, 26^{6}, $\frac{105}{4}^{4}$, 29^{1}, 32^{3}, 33^{1}, 34^{1}, 36^{1}, 37^{4}, 38^{2}, 44^{1}, 48^{1}, 64^{3}, 68^{1}, ∞^{49}	0^{1}, 1^{2}, 2^{2}, $\frac{8}{3}^{3}$, 5^{6}, 6^{12}, $\frac{20}{3}^{6}$, 8^{13}, 9^{2}, 13^{14}, 14^{8}, $\frac{44}{3}^{12}$, 16^{18}, 17^{10}, 18^{6}, $\frac{56}{3}^{30}$, 21^{16}, 22^{44}, $\frac{68}{3}^{24}$, 23^{8}, $\frac{93}{4}^{16}$, $\frac{47}{2}^{16}$, 24^{26}, 25^{8}, $\frac{101}{4}^{16}$, $\frac{51}{2}^{8}$, $\frac{77}{3}^{24}$, 26^{12}, $\frac{105}{4}^{8}$, 29^{2}, $\frac{88}{3}^{147}$, 32^{3}, 33^{2}, 34^{2}, 36^{1}, 37^{6}, 38^{2}, 44^{1}, 48^{1}, 64^{3}, 68^{1}, ∞^{493}
45	2^{1}, $\frac{5}{2}^{2}$, 6^{2}, $\frac{13}{2}^{4}$, 7^{2}, $\frac{22}{3}^{3}$, 10^{1}, 14^{5}, $\frac{46}{3}^{3}$, 16^{2}, $\frac{50}{3}^{6}$, 18^{4}, $\frac{37}{2}^{4}$, $\frac{58}{3}^{3}$, 22^{7}, 24^{1}, 32^{1}	2^{1}, $\frac{5}{2}^{2}$, 6^{2}, $\frac{13}{2}^{4}$, 7^{2}, $\frac{22}{3}^{3}$, 10^{1}, 14^{5}, $\frac{46}{3}^{3}$, 16^{2}, $\frac{50}{3}^{6}$, 18^{4}, $\frac{37}{2}^{4}$, $\frac{58}{3}^{3}$, 22^{7}, $\frac{45}{2}^{16}$, 23^{8}, $\frac{70}{3}^{9}$, 24^{13}, $\frac{49}{2}^{4}$, $\frac{74}{3}^{15}$, 26^{11}, $\frac{79}{3}^{12}$, $\frac{53}{2}^{6}$, 27^{6}, 32^{1}, 34^{1}, $\frac{69}{2}^{2}$, 38^{2}, ∞^{205}	0^{1}, 2^{3}, $\frac{5}{2}^{4}$, $\frac{10}{3}^{3}$, 6^{7}, $\frac{13}{2}^{8}$, 7^{4}, $\frac{22}{3}^{6}$, 8^{1}, $\frac{26}{3}^{15}$, 10^{2}, 14^{15}, $\frac{46}{3}^{12}$, 16^{6}, $\frac{50}{3}^{12}$, 18^{13}, $\frac{37}{2}^{12}$, $\frac{58}{3}^{27}$, 22^{18}, $\frac{45}{2}^{24}$, 23^{12}, $\frac{70}{3}^{15}$, 24^{14}, $\frac{49}{2}^{4}$, $\frac{74}{3}^{15}$, 26^{13}, $\frac{79}{3}^{12}$, $\frac{53}{2}^{6}$, 27^{6}, 32^{3}, 34^{2}, $\frac{69}{2}^{2}$, 38^{5}, 40^{1}, 48^{1}, 64^{4}, 66^{1}, ∞^{51}	0^{1}, 2^{3}, $\frac{5}{2}^{4}$, $\frac{10}{3}^{3}$, 6^{7}, $\frac{13}{2}^{8}$, 7^{4}, $\frac{22}{3}^{6}$, 8^{1}, $\frac{26}{3}^{15}$, 10^{2}, 14^{15}, $\frac{46}{3}^{12}$, 16^{6}, $\frac{50}{3}^{12}$, 18^{13}, $\frac{37}{2}^{12}$, $\frac{58}{3}^{27}$, 22^{18}, $\frac{45}{2}^{40}$, 23^{20}, $\frac{70}{3}^{24}$, 24^{26}, $\frac{49}{2}^{8}$, $\frac{74}{3}^{30}$, 26^{24}, $\frac{79}{3}^{24}$, $\frac{53}{2}^{12}$, 27^{12}, 30^{154}, 32^{3}, 34^{3}, $\frac{69}{2}^{4}$, 38^{7}, 40^{1}, 48^{1}, 64^{4}, 66^{1}, ∞^{514}

46	$1^1, 3^3, 7^7, \frac{31}{4}^4, 8^1, 9^1, 15^5, 16^3, 17^3, \frac{52}{3}^6, 19^8, 20^4, 23^6, 24^1, 32^1$	$1^1, 3^3, 7^7, \frac{31}{4}^4, 8^1, 9^1, 15^5, 16^3, 17^3, \frac{52}{3}^6, 19^8, 20^4, 23^{21}, \frac{95}{4}^{16}, 24^{10}, \frac{99}{4}^8, 25^5, \frac{76}{3}^{18}, \frac{107}{4}^{12}, 27^{10}, \frac{109}{4}^4, \frac{111}{4}^4, 32^1, 33^1, 35^3, 39^2, \infty^{215}$	$0^1, 1^2, 3^8, 4^4, 7^{16}, \frac{31}{4}^8, 8^3, 9^2, \frac{28}{3}^{18}, 15^{16}, 16^{10}, 17^{10}, \frac{52}{3}^{12}, 19^{24}, 20^{27}, 23^{41}, \frac{95}{4}^{24}, 24^{13}, \frac{99}{4}^8, 25^7, \frac{76}{3}^{18}, \frac{107}{4}^{12}, 27^{10}, \frac{109}{4}^4, \frac{111}{4}^4, 32^2, 33^1, 35^5, 39^4, 40^1, 48^1, 64^4, 67^2, \infty^{54}$	$0^1, 1^2, 3^8, 4^4, 7^{16}, \frac{31}{4}^8, 8^3, 9^2, \frac{28}{3}^{18}, 15^{16}, 16^{10}, 17^{10}, \frac{52}{3}^{12}, 19^{24}, 20^{27}, 23^{56}, \frac{95}{4}^{40}, 24^{22}, \frac{99}{4}^{16}, 25^{12}, \frac{76}{3}^{36}, \frac{107}{4}^{24}, 27^{20}, \frac{109}{4}^8, \frac{111}{4}^8, \frac{92}{3}^{162}, 32^2, 33^2, 35^8, 39^6, 40^1, 48^1, 64^4, 67^2, \infty^{537}$
47	$\frac{3}{2}^2, \frac{7}{2}^2, 4^1, \frac{15}{2}^6, 8^4, \frac{17}{2}^2, \frac{19}{2}^2, 16^6, \frac{35}{2}^6, 18^5, \frac{39}{2}^4, 20^3, \frac{62}{3}^6, 24^5, 32^2$	$\frac{3}{2}^2, \frac{7}{2}^2, 4^1, \frac{15}{2}^6, 8^4, \frac{17}{2}^2, \frac{19}{2}^2, 16^6, \frac{35}{2}^6, 18^5, \frac{39}{2}^4, 20^3, \frac{62}{3}^6, \frac{47}{2}^{16}, 24^{12}, \frac{49}{2}^8, \frac{74}{3}^{12}, \frac{51}{2}^{14}, 26^{19}, \frac{55}{2}^{18}, \frac{223}{8}^8, 28^2, \frac{57}{2}^2, 32^2, \frac{67}{2}^2, \frac{71}{2}^2, 36^1, 40^1, \infty^{224}$	$0^1, \frac{3}{2}^4, 2^1, \frac{7}{2}^4, 4^3, \frac{14}{3}^6, \frac{15}{2}^{12}, 8^{11}, \frac{17}{2}^4, \frac{19}{2}^4, 10^{19}, 16^{19}, \frac{35}{2}^{20}, 18^{11}, \frac{39}{2}^{12}, 20^9, \frac{62}{3}^{30}, \frac{47}{2}^{28}, 24^{25}, \frac{49}{2}^{12}, \frac{74}{3}^{12}, \frac{51}{2}^{18}, 26^{19}, \frac{55}{2}^{18}, \frac{223}{8}^8, 28^2, \frac{57}{2}^2, 32^4, \frac{67}{2}^2, \frac{71}{2}^2, 36^2, 40^4, 48^2, 64^4, 66^1, 68^1, \infty^{56}$	$0^1, \frac{3}{2}^4, 2^1, \frac{7}{2}^4, 4^3, \frac{14}{3}^6, \frac{15}{2}^{12}, 8^{11}, \frac{17}{2}^4, \frac{19}{2}^4, 10^{19}, 16^{19}, \frac{35}{2}^{20}, 18^{11}, \frac{39}{2}^{12}, 20^9, \frac{62}{3}^{30}, \frac{47}{2}^{44}, 24^{32}, \frac{49}{2}^{20}, \frac{74}{3}^{24}, \frac{51}{2}^{32}, 26^{38}, \frac{55}{2}^{36}, \frac{223}{8}^{16}, 28^4, \frac{57}{2}^4, \frac{94}{3}^{168}, 32^4, \frac{67}{2}^4, \frac{71}{2}^4, 36^3, 40^5, 48^2, 64^4, 66^1, 68^1, \infty^{560}$
48	$1^1, 2^1, 4^3, 5^1, 8^5, \frac{26}{3}^6, 9^2, 10^3, 17^6, 18^3, \frac{56}{3}^6, 20^6, 21^2, \frac{64}{3}^6, 24^1, 25^4, 32^2$	$1^1, 2^1, 4^3, 5^1, 8^5, \frac{26}{3}^6, 9^2, 10^3, 17^6, 18^3, \frac{56}{3}^6, 20^6, 21^2, \frac{64}{3}^6, 24^{18}, \frac{74}{3}^{12}, 25^7, \frac{76}{3}^{12}, 26^9, \frac{105}{4}^8, \frac{80}{3}^{21}, 28^8, \frac{113}{4}^8, \frac{57}{2}^4, \frac{86}{3}^6, 30^2, 32^2, 33^1, 34^1, 36^3, 37^1, 41^1, \infty^{233}$	$0^1, 1^2, 2^2, \frac{8}{3}^3, 4^6, 5^2, \frac{16}{3}^6, 8^{11}, \frac{26}{3}^{12}, 9^6, 10^6, \frac{32}{3}^{21}, 16^2, 17^{18}, 18^{10}, \frac{56}{3}^{15}, 20^{18}, 21^6, \frac{64}{3}^{27}, 24^{30}, \frac{74}{3}^{24}, 25^{15}, \frac{76}{3}^{12}, 26^{15}, \frac{105}{4}^8, \frac{80}{3}^{21}, 28^8, \frac{113}{4}^8, \frac{57}{2}^4, \frac{86}{3}^6, 30^2, 32^4, 33^1, 34^1, 36^3, 37^1, 40^1, 41^3, 48^2, 64^5, 68^1, 72^1, \infty^{58}$	$0^1, 1^2, 2^2, \frac{8}{3}^3, 4^6, 5^2, \frac{16}{3}^6, 8^{11}, \frac{26}{3}^{12}, 9^6, 10^6, \frac{32}{3}^{21}, 16^2, 17^{18}, 18^{10}, \frac{56}{3}^{15}, 20^{18}, 21^6, \frac{64}{3}^{27}, 24^{47}, \frac{74}{3}^{36}, 25^{18}, \frac{76}{3}^{24}, 26^{24}, \frac{105}{4}^{16}, \frac{80}{3}^{42}, 28^{16}, \frac{113}{4}^{16}, \frac{57}{2}^8, \frac{86}{3}^{12}, 30^4, 32^{179}, 33^2, 34^2, 36^6, 37^2, 40^1, 41^4, 48^2, 64^5, 68^1, 72^1, \infty^{583}$

49	2^1, 4^1, $\frac{9}{2}^2$, 5^2, 8^1, $\frac{17}{2}^6$, 9^2, $\frac{28}{3}^6$, 10^2, $\frac{21}{2}^2$, 18^6, $\frac{58}{3}^6$, 20^2, $\frac{41}{2}^4$, 21^4, 22^7, 24^2, 26^3, 32^2	2^1, 4^1, $\frac{9}{2}^2$, 5^2, 8^1, $\frac{17}{2}^6$, 9^2, $\frac{28}{3}^6$, 10^2, $\frac{21}{2}^2$, 18^6, $\frac{58}{3}^6$, 20^2, $\frac{41}{2}^4$, 21^4, 22^7, 24^2, $\frac{49}{2}^{16}$, 25^8, $\frac{76}{3}^{12}$, 26^{18}, $\frac{53}{2}^8$, 27^4, $\frac{82}{3}^{24}$, $\frac{57}{2}^8$, 29^{10}, $\frac{88}{3}^6$, $\frac{61}{2}^2$, 32^2, 34^1, 36^1, $\frac{73}{2}^2$, 37^2, 40^1, 42^1, ∞^{243}	0^1, 2^3, $\frac{10}{3}^3$, 4^2, $\frac{9}{2}^4$, 5^4, 6^7, 8^3, $\frac{17}{2}^{12}$, 9^4, $\frac{28}{3}^{12}$, 10^5, $\frac{21}{2}^4$, $\frac{34}{3}^{24}$, 16^2, 18^{19}, $\frac{58}{3}^{15}$, 20^6, $\frac{41}{2}^{12}$, 21^{12}, 22^{27}, 24^7, $\frac{49}{2}^{24}$, 25^{12}, $\frac{76}{3}^{24}$, 26^{25}, $\frac{53}{2}^{12}$, 27^4, $\frac{82}{3}^{24}$, $\frac{57}{2}^8$, 29^{10}, $\frac{88}{3}^6$, $\frac{61}{2}^2$, 32^5, 34^1, 36^1, $\frac{73}{2}^2$, 37^2, 40^2, 42^2, 48^2, 64^5, 66^2, 72^1, ∞^{61}	0^1, 2^3, $\frac{10}{3}^3$, 4^2, $\frac{9}{2}^4$, 5^4, 6^7, 8^3, $\frac{17}{2}^{12}$, 9^4, $\frac{28}{3}^{12}$, 10^5, $\frac{21}{2}^4$, $\frac{34}{3}^{24}$, 16^2, 18^{19}, $\frac{58}{3}^{15}$, 20^6, $\frac{41}{2}^{12}$, 21^{12}, 22^{27}, 24^7, $\frac{49}{2}^{40}$, 25^{20}, $\frac{76}{3}^{36}$, 26^{40}, $\frac{53}{2}^{20}$, 27^8, $\frac{82}{3}^{48}$, $\frac{57}{2}^{16}$, 29^{20}, $\frac{88}{3}^{12}$, $\frac{61}{2}^4$, 32^5, $\frac{98}{3}^{183}$, 34^2, 36^2, $\frac{73}{2}^2$, 37^4, 40^3, 42^3, 48^2, 64^5, 66^2, 72^1, ∞^{607}
50	1^1, 3^1, 4^1, 5^1, $\frac{23}{4}^4$, 8^1, 9^7, $\frac{39}{4}^4$, 10^2, $\frac{41}{4}^4$, 11^1, 19^7, 20^4, 21^4, $\frac{87}{4}^8$, $\frac{68}{3}^6$, 24^1, 25^2, 27^2, 32^2	1^1, 3^1, 4^1, 5^1, $\frac{23}{4}^4$, 8^1, 9^7, $\frac{39}{4}^4$, 10^2, $\frac{41}{4}^4$, 11^1, 19^7, 20^4, 21^4, $\frac{87}{4}^8$, $\frac{68}{3}^6$, 24^1, 25^{19}, $\frac{103}{4}^{16}$, 26^4, $\frac{105}{4}^8$, $\frac{80}{3}^{12}$, 27^3, $\frac{109}{4}^4$, $\frac{111}{4}^8$, 28^{25}, 29^8, $\frac{119}{4}^8$, 30^2, $\frac{121}{4}^4$, 32^2, 33^1, 35^1, 36^1, 37^1, $\frac{151}{4}^4$, 40^1, ∞^{253}	0^1, 1^2, 3^4, 4^3, 5^4, $\frac{23}{4}^8$, $\frac{20}{3}^6$, 8^2, 9^{16}, $\frac{39}{4}^8$, 10^4, $\frac{41}{4}^8$, 11^4, 12^{28}, 16^2, 19^{20}, 20^{11}, 21^{12}, $\frac{87}{4}^{24}$, $\frac{68}{3}^{24}$, 24^4, 25^{31}, $\frac{103}{4}^{24}$, 26^8, $\frac{105}{4}^{16}$, $\frac{80}{3}^{12}$, 27^7, $\frac{109}{4}^4$, $\frac{111}{4}^8$, 28^{25}, 29^8, $\frac{119}{4}^8$, 30^2, $\frac{121}{4}^4$, 32^5, 33^1, 35^1, 36^1, 37^1, $\frac{151}{4}^4$, 40^1, 43^2, 48^2, 64^5, 67^4, ∞^{63}	0^1, 1^2, 3^4, 4^3, 5^4, $\frac{23}{4}^8$, $\frac{20}{3}^6$, 8^2, 9^{16}, $\frac{39}{4}^8$, 10^4, $\frac{41}{4}^8$, 11^4, 12^{28}, 16^2, 19^{20}, 20^{11}, 21^{12}, $\frac{87}{4}^{24}$, $\frac{68}{3}^{24}$, 24^4, 25^{48}, $\frac{103}{4}^{40}$, 26^{12}, $\frac{105}{4}^{24}$, $\frac{80}{3}^{24}$, 27^8, $\frac{109}{4}^8$, $\frac{111}{4}^{16}$, 28^{50}, 29^{16}, $\frac{119}{4}^{16}$, 30^4, $\frac{121}{4}^8$, 32^5, 33^2, $\frac{100}{3}^{189}$, 35^2, 36^2, 37^2, $\frac{151}{4}^8$, 40^2, 43^2, 48^2, 64^5, 67^4, ∞^{632}

1.2 $i = 2$.

Table 2: Slopes for $q = 2$, $i = 2$. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
0				0^1
1		0^1	0^1	$0^2, \infty^1$
2		0^2	$0^1, \infty^1$	$0^3, \infty^3$
3		0^3	$0^1, \infty^2$	$0^4, 1^1, \infty^5$
4	0^1	$0^4, \infty^1$	$0^2, \infty^3$	$0^5, \frac{4}{3}^3, \infty^7$
5	0^1	$0^5, 1^1, \infty^1$	$0^2, 1^1, \infty^4$	$0^6, 1^2, \frac{5}{3}^3, \infty^{10}$
6	0^1	$0^6, \frac{3}{2}^2, \infty^1$	$0^2, \frac{3}{2}^2, \infty^5$	$0^7, \frac{3}{2}^4, 2^4, \infty^{13}$
7	0^2	$0^7, 1^2, 2^1, \infty^2$	$0^3, 1^1, 2^1, \infty^7$	$0^8, 1^3, 2^2, \frac{7}{3}^6, \infty^{17}$
8	0^2	$0^8, \frac{4}{3}^3, 2^1, 4^1, \infty^2$	$0^3, \frac{4}{3}^3, 4^1, \infty^8$	$0^9, \frac{4}{3}^6, 2^1, \frac{8}{3}^6, 4^2, \infty^{21}$
9	0^2	$0^9, 1^3, \frac{5}{3}^3, 4^1, \infty^2$	$0^3, 1^1, \frac{5}{3}^3, 4^1, \infty^{10}$	$0^{10}, 1^4, \frac{5}{3}^6, 3^7, 4^2, \infty^{26}$
10	0^3	$0^{10}, \frac{3}{2}^6, 2^1, \frac{5}{2}^2, \infty^3$	$0^4, \frac{3}{2}^2, 2^1, \frac{5}{2}^2, \infty^{13}$	$0^{11}, \frac{3}{2}^8, 2^2, \frac{5}{2}^4, \frac{10}{3}^9, \infty^{32}$
11	$0^3, 1^1$	$0^{11}, 1^4, 2^3, \frac{11}{4}^4, \infty^4$	$0^4, 1^2, 2^1, \frac{11}{4}^4, \infty^{15}$	$0^{12}, 1^5, 2^4, \frac{11}{4}^8, \frac{11}{3}^{12}, \infty^{37}$
12	$0^3, 2^1$	$0^{12}, \frac{4}{3}^6, 2^2, \frac{5}{2}^2, 3^2, 6^1, 8^1, \infty^4$	$0^4, \frac{4}{3}^3, 2^1, \frac{5}{2}^2, 3^2, 8^1, \infty^{17}$	$0^{13}, \frac{4}{3}^9, 2^2, \frac{5}{2}^4, 3^4, 4^{13}, 6^1, 8^2, \infty^{43}$
13	$0^4, 1^1$	$0^{13}, 1^5, \frac{5}{3}^6, 3^3, 4^1, 7^1, 8^1, \infty^5$	$0^5, 1^2, \frac{5}{3}^3, 3^3, 4^1, 8^1, \infty^{20}$	$0^{14}, 1^6, \frac{5}{3}^9, 3^6, 4^2, \frac{13}{3}^{15}, 7^1, 8^2, \infty^{50}$
14	$0^4, \frac{3}{2}^2$	$0^{14}, \frac{3}{2}^{10}, 2^5, \frac{7}{2}^2, 4^2, 8^1, \infty^6$	$0^5, \frac{3}{2}^4, 2^4, \frac{7}{2}^2, 4^1, 8^1, \infty^{23}$	$0^{15}, \frac{3}{2}^{12}, 2^9, \frac{7}{2}^4, 4^3, \frac{14}{3}^{18}, 8^2, \infty^{57}$
15	$0^4, 1^1, 2^1$	$0^{15}, 1^6, 2^5, \frac{7}{3}^6, 4^5, 8^2, \infty^6$	$0^5, 1^2, 2^2, \frac{7}{3}^6, 4^3, 8^2, \infty^{25}$	$0^{16}, 1^7, 2^6, \frac{7}{3}^{12}, 4^8, 5^{19}, 8^4, \infty^{64}$
16	$0^5, 2^1, 4^1$	$0^{16}, \frac{4}{3}^9, 2^3, \frac{8}{3}^6, 4^6, \frac{9}{2}^2, 8^2, \infty^7$	$0^6, \frac{4}{3}^3, 2^1, \frac{8}{3}^6, 4^2, \frac{9}{2}^2, 8^2, \infty^{29}$	$0^{17}, \frac{4}{3}^{12}, 2^3, \frac{8}{3}^{12}, 4^7, \frac{9}{2}^4, \frac{16}{3}^{21}, 8^4, \infty^{73}$
17	$0^5, 1^2, 4^1$	$0^{17}, 1^7, \frac{5}{3}^9, 3^8, 4^5, 5^1, 8^2, \infty^8$	$0^6, 1^3, \frac{5}{3}^3, 3^7, 4^2, 5^1, 8^2, \infty^{33}$	$0^{18}, 1^8, \frac{5}{3}^{12}, 3^{15}, 4^6, 5^2, \frac{17}{3}^{24}, 8^4, \infty^{82}$
18	$0^5, \frac{3}{2}^4$	$0^{18}, \frac{3}{2}^{14}, 2^3, \frac{5}{2}^6, \frac{10}{3}^6, 4^1, \frac{9}{2}^2, \frac{11}{2}^2, 8^2, \infty^9$	$0^6, \frac{3}{2}^6, 2^1, \frac{5}{2}^2, \frac{10}{3}^6, \frac{9}{2}^2, \frac{11}{2}^2, 8^2, \infty^{36}$	$0^{19}, \frac{3}{2}^{16}, 2^4, \frac{5}{2}^8, \frac{10}{3}^{12}, 4^1, \frac{9}{2}^4, \frac{11}{2}^4, 6^{28}, 8^4, \infty^{90}$
19	$0^6, 1^2, 2^2$	$0^{19}, 1^8, 2^7, \frac{11}{4}^{12}, \frac{11}{3}^6, \frac{19}{4}^4, 5^1, 6^1, 8^1, 9^1, \infty^{10}$	$0^7, 1^3, 2^3, \frac{11}{4}^4, \frac{11}{3}^6, \frac{19}{4}^4, 6^1, 8^1, 9^1, \infty^{40}$	$0^{20}, 1^9, 2^8, \frac{11}{4}^{16}, \frac{11}{3}^{12}, \frac{19}{4}^8, 5^1, 6^2, \frac{19}{3}^{30}, 8^2, 9^2, \infty^{100}$

20	$0^6, \frac{4}{3}^3, 2^1, 6^1$	$0^{20}, \frac{4}{3}^{12}, 2^4, \frac{5}{2}^6, 3^6, 4^7, \frac{9}{2}^2, 5^2, 6^3, 8^1, 10^1, 14^1, 16^1, \infty^{11}$	$0^7, \frac{4}{3}^6, 2^1, \frac{5}{2}^2, 3^2, 4^7, \frac{9}{2}^2, 5^2, 6^1, 8^1, 10^1, 16^1, \infty^{44}$	$0^{21}, \frac{4}{3}^{15}, 2^4, \frac{5}{2}^8, 3^8, 4^{14}, \frac{9}{2}^4, 5^4, 6^3, \frac{20}{3}^{33}, 8^2, 10^2, 14^1, 16^2, \infty^{110}$
21	$0^6, 1^2, \frac{5}{3}^3, 7^1$	$0^{21}, 1^9, \frac{5}{3}^{12}, 3^9, 4^3, \frac{13}{3}^6, 5^2, \frac{21}{4}^4, 7^2, 8^1, 9^1, 15^1, 16^1, \infty^{12}$	$0^7, 1^3, \frac{5}{3}^6, 3^3, 4^1, \frac{13}{3}^6, 5^2, \frac{21}{4}^4, 7^1, 8^1, 9^1, 16^1, \infty^{48}$	$0^{22}, 1^{10}, \frac{5}{3}^{15}, 3^{12}, 4^4, \frac{13}{3}^{12}, 5^4, \frac{21}{4}^8, 7^{39}, 8^2, 9^2, 15^1, 16^2, \infty^{120}$
22	$0^7, \frac{3}{2}^4, 2^1, 4^1$	$0^{22}, \frac{3}{2}^{18}, 2^{10}, \frac{7}{2}^6, 4^5, \frac{9}{2}^2, \frac{14}{3}^6, \frac{11}{2}^6, \frac{19}{2}^2, 12^1, 16^1, \infty^{13}$	$0^8, \frac{3}{2}^6, 2^5, \frac{7}{2}^2, 4^2, \frac{9}{2}^2, \frac{14}{3}^6, \frac{11}{2}^6, \frac{19}{2}^2, 16^1, \infty^{52}$	$0^{23}, \frac{3}{2}^{20}, 2^{14}, \frac{7}{2}^8, 4^6, \frac{9}{2}^4, \frac{14}{3}^{12}, \frac{11}{2}^{12}, \frac{22}{3}^{39}, \frac{19}{2}^4, 12^1, 16^2, \infty^{131}$
23	$0^7, 1^3, 2^2, 4^2$	$0^{23}, 1^{10}, 2^9, \frac{7}{3}^{12}, 4^{13}, \frac{19}{4}^4, 5^4, \frac{23}{4}^4, 6^2, 10^1, 12^2, 16^2, \infty^{14}$	$0^8, 1^4, 2^3, \frac{7}{3}^6, 4^5, \frac{19}{4}^4, 5^4, \frac{23}{4}^4, 6^2, 10^1, 16^2, \infty^{57}$	$0^{24}, 1^{11}, 2^{10}, \frac{7}{3}^{18}, 4^{16}, \frac{19}{4}^8, 5^8, \frac{23}{4}^8, 6^4, \frac{23}{3}^{42}, 10^2, 12^2, 16^4, \infty^{143}$
24	$0^7, \frac{4}{3}^3, 2^2, 4^3$	$0^{24}, \frac{4}{3}^{15}, 2^5, \frac{8}{3}^{12}, 4^{11}, \frac{9}{2}^8, 5^2, \frac{16}{3}^3, 6^6, \frac{13}{2}^2, 10^1, 12^2, 16^2, \infty^{15}$	$0^8, \frac{4}{3}^6, 2^2, \frac{8}{3}^6, 4^4, \frac{9}{2}^4, 5^2, \frac{16}{3}^3, 6^6, \frac{13}{2}^2, 12^1, 16^2, \infty^{62}$	$0^{25}, \frac{4}{3}^{18}, 2^5, \frac{8}{3}^{18}, 4^{12}, \frac{9}{2}^{12}, 5^4, \frac{16}{3}^6, 6^{12}, \frac{13}{2}^4, 8^{46}, 10^1, 12^3, 16^4, \infty^{155}$
25	$0^8, 1^3, \frac{5}{3}^3, 3^1, 4^2$	$0^{25}, 1^{11}, \frac{5}{3}^{15}, 3^{16}, 4^9, 5^5, \frac{17}{3}^3, 6^2, \frac{25}{4}^4, \frac{13}{2}^4, 8^1, 11^1, 12^1, 15^1, 16^2, \infty^{17}$	$0^9, 1^4, \frac{5}{3}^6, 3^8, 4^3, 5^3, \frac{17}{3}^3, 6^2, \frac{25}{4}^4, \frac{13}{2}^4, 8^1, 12^1, 16^2, \infty^{67}$	$0^{26}, 1^{12}, \frac{5}{3}^{18}, 3^{23}, 4^{10}, 5^8, \frac{17}{3}^6, 6^4, \frac{25}{4}^8, \frac{13}{2}^8, 8^2, \frac{25}{3}^{51}, 11^1, 12^2, 15^1, 16^4, \infty^{167}$
26	$0^8, \frac{3}{2}^6, 2^1, \frac{5}{2}^2, 4^1$	$0^{26}, \frac{3}{2}^{22}, 2^5, \frac{5}{2}^{10}, \frac{10}{3}^{15}, 4^2, \frac{11}{2}^8, 6^3, \frac{13}{2}^2, \frac{55}{8}^8, 8^2, 12^1, 14^1, 16^3, \infty^{18}$	$0^9, \frac{3}{2}^8, 2^2, \frac{5}{2}^4, \frac{10}{3}^9, 4^1, \frac{11}{2}^4, 6^3, \frac{13}{2}^2, \frac{55}{8}^8, 8^1, 16^3, \infty^{72}$	$0^{27}, \frac{3}{2}^{24}, 2^6, \frac{5}{2}^{12}, \frac{10}{3}^{24}, 4^2, \frac{11}{2}^{12}, 6^6, \frac{13}{2}^4, \frac{55}{8}^{16}, 8^3, \frac{26}{3}^{54}, 12^1, 14^1, 16^6, \infty^{180}$
27	$0^8, 1^3, 2^3, \frac{11}{4}^4, 5^1$	$0^{27}, 1^{12}, 2^{11}, \frac{11}{4}^{20}, \frac{11}{3}^{18}, 5^2, 6^7, \frac{27}{4}^4, 7^2, \frac{29}{4}^4, 8^3, 13^2, 16^3, 17^1, \infty^{19}$	$0^9, 1^4, 2^4, \frac{11}{4}^8, \frac{11}{3}^{12}, 5^1, 6^5, \frac{27}{4}^4, 7^2, \frac{29}{4}^4, 8^1, 16^3, 17^1, \infty^{77}$	$0^{28}, 1^{13}, 2^{12}, \frac{11}{4}^{24}, \frac{11}{3}^{30}, 5^2, 6^{12}, \frac{27}{4}^8, 7^4, \frac{29}{4}^8, 8^4, 9^{58}, 13^2, 16^6, 17^2, \infty^{193}$
28	$0^9, \frac{4}{3}^3, 2^2, \frac{5}{2}^2, 3^2, 6^2, 8^1$	$0^{28}, \frac{4}{3}^{18}, 2^6, \frac{5}{2}^{10}, 3^{10}, 4^{20}, 6^5, \frac{13}{2}^4, 7^2, \frac{22}{3}^6, 8^7, \frac{17}{2}^2, 14^2, 16^3, 18^1, \infty^{21}$	$0^{10}, \frac{4}{3}^6, 2^2, \frac{5}{2}^4, 3^4, 4^{13}, 6^2, \frac{13}{2}^4, 7^2, \frac{22}{3}^6, 8^3, \frac{17}{2}^2, 16^3, 18^1, \infty^{83}$	$0^{29}, \frac{4}{3}^{21}, 2^6, \frac{5}{2}^{12}, 3^{12}, 4^{33}, 6^5, \frac{13}{2}^8, 7^4, \frac{22}{3}^{12}, 8^9, \frac{17}{2}^4, \frac{28}{3}^{63}, 14^2, 16^6, 18^2, \infty^{207}$
29	$0^9, 1^4, \frac{5}{3}^3, 3^3, 4^1, 7^1, 8^1$	$0^{29}, 1^{13}, \frac{5}{3}^{18}, 3^{15}, 4^5, \frac{13}{3}^{21}, 7^8, \frac{23}{3}^6, 8^8, 9^3, 15^2, 16^4, 17^1, \infty^{22}$	$0^{10}, 1^5, \frac{5}{3}^6, 3^6, 4^2, \frac{13}{3}^{15}, 7^6, \frac{23}{3}^6, 8^3, 9^3, 16^4, 17^1, \infty^{88}$	$0^{30}, 1^{14}, \frac{5}{3}^{21}, 3^{18}, 4^6, \frac{13}{3}^{36}, 7^{13}, \frac{23}{3}^{12}, 8^{10}, 9^6, \frac{29}{3}^{66}, 15^2, 16^8, 17^2, \infty^{221}$

30	0^9, $\frac{3}{2}^8$, 2^1, $\frac{7}{2}^2$, 4^2, 8^1	0^{30}, $\frac{3}{2}^{26}$, 2^{15}, $\frac{7}{2}^{10}$, 4^8, $\frac{14}{3}^{24}$, $\frac{15}{2}^6$, 8^{11}, $\frac{17}{2}^2$, $\frac{19}{2}^2$, 16^6, $\frac{35}{2}^2$, ∞^{23}	0^{10}, $\frac{3}{2}^{10}$, 2^5, $\frac{7}{2}^4$, 4^3, $\frac{14}{3}^{18}$, $\frac{15}{2}^6$, 8^5, $\frac{17}{2}^2$, $\frac{19}{2}^2$, 16^4, $\frac{35}{2}^2$, ∞^{94}	0^{31}, $\frac{3}{2}^{28}$, 2^{19}, $\frac{7}{2}^{12}$, 4^9, $\frac{14}{3}^{42}$, $\frac{15}{2}^{12}$, 8^{15}, $\frac{17}{2}^4$, $\frac{19}{2}^4$, 10^{70}, 16^{10}, $\frac{35}{2}^4$, ∞^{236}
31	0^{10}, 1^4, 2^4, 4^5, 8^2	0^{31}, 1^{14}, 2^{13}, $\frac{7}{3}^{18}$, 4^{21}, 5^{23}, 8^{17}, $\frac{35}{4}^4$, 9^2, 10^1, 16^4, 17^2, 18^1, ∞^{25}	0^{11}, 1^5, 2^5, $\frac{7}{3}^6$, 4^8, 5^{19}, 8^9, $\frac{35}{4}^4$, 9^1, 10^1, 16^4, 17^1, 18^1, ∞^{101}	0^{32}, 1^{15}, 2^{14}, $\frac{7}{3}^{24}$, 4^{24}, 5^{42}, 8^{24}, $\frac{35}{4}^8$, 9^3, 10^2, $\frac{31}{3}^{75}$, 16^8, 17^3, 18^2, ∞^{252}
32	0^{10}, $\frac{4}{3}^6$, 2^2, 4^5, $\frac{9}{2}^2$, 8^2	0^{32}, $\frac{4}{3}^{21}$, 2^7, $\frac{8}{3}^{18}$, 4^{16}, $\frac{9}{2}^{10}$, $\frac{16}{3}^{24}$, 8^{13}, $\frac{17}{2}^4$, 9^2, $\frac{28}{3}^3$, 10^1, 12^1, 16^5, 18^2, 20^1, ∞^{27}	0^{11}, $\frac{4}{3}^9$, 2^2, $\frac{8}{3}^6$, 4^6, $\frac{9}{2}^4$, $\frac{16}{3}^{21}$, 8^4, $\frac{17}{2}^4$, 9^2, $\frac{28}{3}^3$, 12^1, 16^5, 18^1, 20^1, ∞^{107}	0^{33}, $\frac{4}{3}^{24}$, 2^7, $\frac{8}{3}^{24}$, 4^{17}, $\frac{9}{2}^{12}$, $\frac{16}{3}^{45}$, 8^{15}, $\frac{17}{2}^8$, 9^4, $\frac{28}{3}^6$, 10^1, $\frac{32}{3}^{81}$, 12^2, 16^{10}, 18^3, 20^2, ∞^{267}
33	0^{10}, 1^4, $\frac{5}{3}^6$, 3^1, 4^4, 5^1, 8^2	0^{33}, 1^{15}, $\frac{5}{3}^{21}$, 3^{24}, 4^{13}, 5^5, $\frac{17}{3}^{27}$, 8^{12}, 9^7, $\frac{29}{3}^3$, 12^1, 16^5, 17^2, 19^1, 20^1, ∞^{28}	0^{11}, 1^5, $\frac{5}{3}^9$, 3^8, 4^5, 5^2, $\frac{17}{3}^{24}$, 8^4, 9^5, $\frac{29}{3}^3$, 12^1, 16^5, 17^2, 20^1, ∞^{113}	0^{34}, 1^{16}, $\frac{5}{3}^{24}$, 3^{31}, 4^{14}, 5^6, $\frac{17}{3}^{51}$, 8^{14}, 9^{12}, $\frac{29}{3}^6$, 11^{85}, 12^2, 16^{10}, 17^4, 19^1, 20^2, ∞^{283}
34	0^{11}, $\frac{3}{2}^8$, 2^2, $\frac{5}{2}^4$, 4^1, $\frac{11}{2}^2$, 8^2	0^{34}, $\frac{3}{2}^{30}$, 2^7, $\frac{5}{2}^{14}$, $\frac{10}{3}^{18}$, 4^3, $\frac{9}{2}^6$, $\frac{11}{2}^{10}$, 6^{26}, 8^{11}, $\frac{17}{2}^2$, $\frac{19}{2}^8$, 10^1, $\frac{21}{2}^2$, 16^4, $\frac{35}{2}^4$, ∞^{30}	0^{12}, $\frac{3}{2}^{10}$, 2^3, $\frac{5}{2}^6$, $\frac{10}{3}^6$, 4^1, $\frac{9}{2}^2$, $\frac{11}{2}^4$, 6^{25}, 8^4, $\frac{17}{2}^2$, $\frac{19}{2}^4$, 10^1, $\frac{21}{2}^2$, 16^4, $\frac{35}{2}^4$, ∞^{120}	0^{35}, $\frac{3}{2}^{32}$, 2^8, $\frac{5}{2}^{16}$, $\frac{10}{3}^{24}$, 4^3, $\frac{9}{2}^8$, $\frac{11}{2}^{12}$, 6^{51}, 8^{13}, $\frac{17}{2}^4$, $\frac{19}{2}^{12}$, 10^2, $\frac{21}{2}^4$, $\frac{34}{3}^{90}$, 16^8, $\frac{35}{2}^8$, ∞^{300}
35	0^{11}, 1^5, 2^4, $\frac{11}{4}^8$, 5^1, 6^1, 8^1, 9^1	0^{35}, 1^{16}, 2^{15}, $\frac{11}{4}^{28}$, $\frac{11}{3}^{18}$, $\frac{19}{4}^{12}$, 5^3, 6^5, $\frac{19}{3}^{24}$, 8^7, $\frac{35}{4}^4$, 9^6, 10^5, $\frac{43}{4}^4$, 16^4, 17^2, 18^2, ∞^{32}	0^{12}, 1^6, 2^5, $\frac{11}{4}^{12}$, $\frac{11}{3}^6$, $\frac{19}{4}^4$, 5^1, 6^2, $\frac{19}{3}^{24}$, 8^2, $\frac{35}{4}^4$, 9^2, 10^3, $\frac{43}{4}^4$, 16^4, 17^2, 18^2, ∞^{127}	0^{36}, 1^{17}, 2^{16}, $\frac{11}{4}^{32}$, $\frac{11}{3}^{24}$, $\frac{19}{4}^{16}$, 5^3, 6^6, $\frac{19}{3}^{48}$, 8^8, $\frac{35}{4}^8$, 9^7, 10^8, $\frac{43}{4}^8$, $\frac{35}{3}^{96}$, 16^8, 17^4, 18^4, ∞^{317}
36	0^{11}, $\frac{4}{3}^6$, 2^3, $\frac{5}{2}^4$, 3^4, 6^2, 8^1, 10^1, 14^1	0^{36}, $\frac{4}{3}^{24}$, 2^8, $\frac{5}{2}^{14}$, 3^{14}, 4^{21}, $\frac{9}{2}^6$, 5^6, 6^7, $\frac{20}{3}^{27}$, 8^6, $\frac{17}{2}^2$, 9^2, $\frac{28}{3}^3$, 10^5, $\frac{21}{2}^4$, 11^2, 14^3, 16^4, $\frac{52}{3}^3$, 18^1, 22^1, 30^1, 32^1, ∞^{33}	0^{12}, $\frac{4}{3}^9$, 2^3, $\frac{5}{2}^6$, 3^6, 4^7, $\frac{9}{2}^2$, 5^2, 6^2, $\frac{20}{3}^{27}$, 8^2, $\frac{17}{2}^2$, 9^2, 10^2, $\frac{21}{2}^4$, 11^2, 14^1, 16^4, $\frac{52}{3}^3$, 18^1, 22^1, 32^1, ∞^{133}	0^{37}, $\frac{4}{3}^{27}$, 2^8, $\frac{5}{2}^{16}$, 3^{16}, 4^{28}, $\frac{9}{2}^8$, 5^8, 6^7, $\frac{20}{3}^{54}$, 8^7, $\frac{17}{2}^4$, 9^4, $\frac{28}{3}^3$, 10^6, $\frac{21}{2}^8$, 11^4, 12^{100}, 14^3, 16^8, $\frac{52}{3}^6$, 18^2, 22^2, 30^1, 32^2, ∞^{334}

37	0^{12}, 1^5, $\frac{5}{3}^6$, 3^6, 4^2, 7^1, 8^1, 9^1, 15^1	0^{37}, 1^{17}, $\frac{5}{3}^{24}$, 3^{21}, 4^7, $\frac{13}{3}^{18}$, 5^6, $\frac{21}{4}^{12}$, 7^{33}, 8^5, 9^7, $\frac{37}{4}^4$, $\frac{29}{3}^3$, 11^3, 12^1, 15^3, 16^3, 17^2, $\frac{53}{3}^3$, 23^1, 31^1, 32^1, ∞^{35}	0^{13}, 1^6, $\frac{5}{3}^9$, 3^9, 4^3, $\frac{13}{3}^6$, 5^2, $\frac{21}{4}^4$, 7^{29}, 8^2, 9^4, $\frac{37}{4}^4$, 11^3, 12^1, 15^1, 16^3, 17^2, $\frac{53}{3}^3$, 23^1, 32^1, ∞^{141}	0^{38}, 1^{18}, $\frac{5}{3}^{27}$, 3^{24}, 4^8, $\frac{13}{3}^{24}$, 5^8, $\frac{21}{4}^{16}$, 7^{61}, 8^6, 9^{10}, $\frac{37}{4}^8$, $\frac{29}{3}^3$, 11^6, 12^2, $\frac{37}{3}^{105}$, 15^3, 16^6, 17^4, $\frac{53}{3}^6$, 23^2, 31^1, 32^2, ∞^{353}
38	0^{12}, $\frac{3}{2}^{10}$, 2^5, $\frac{7}{2}^4$, 4^3, $\frac{19}{2}^2$, 12^1	0^{38}, $\frac{3}{2}^{34}$, 2^{20}, $\frac{7}{2}^{14}$, 4^{11}, $\frac{9}{2}^6$, $\frac{14}{3}^{18}$, $\frac{11}{2}^{18}$, $\frac{22}{3}^{27}$, 8^1, $\frac{17}{2}^2$, $\frac{19}{2}^{16}$, 10^1, $\frac{23}{2}^2$, 12^4, 16^3, $\frac{35}{2}^4$, 18^1, 20^1, 28^1, 32^1, ∞^{37}	0^{13}, $\frac{3}{2}^{12}$, 2^9, $\frac{7}{2}^6$, 4^4, $\frac{9}{2}^2$, $\frac{14}{3}^6$, $\frac{11}{2}^6$, $\frac{22}{3}^{27}$, $\frac{17}{2}^2$, $\frac{19}{2}^{10}$, $\frac{23}{2}^2$, 12^2, 16^3, $\frac{35}{2}^4$, 18^1, 20^1, 32^1, ∞^{149}	0^{39}, $\frac{3}{2}^{36}$, 2^{24}, $\frac{7}{2}^{16}$, 4^{12}, $\frac{9}{2}^8$, $\frac{14}{3}^{24}$, $\frac{11}{2}^{24}$, $\frac{22}{3}^{54}$, 8^1, $\frac{17}{2}^4$, $\frac{19}{2}^{24}$, 10^1, $\frac{23}{2}^4$, 12^5, $\frac{38}{3}^{111}$, 16^6, $\frac{35}{2}^8$, 18^2, 20^2, 28^1, 32^2, ∞^{372}
39	0^{12}, 1^5, 2^5, $\frac{7}{3}^6$, 4^8, 10^1, 12^2	0^{39}, 1^{18}, 2^{17}, $\frac{7}{3}^{24}$, 4^{29}, $\frac{19}{4}^{12}$, 5^{12}, $\frac{23}{4}^{12}$, 6^6, $\frac{23}{3}^{27}$, $\frac{35}{4}^4$, 9^1, $\frac{39}{4}^4$, 10^7, 12^9, 16^3, 17^2, 18^2, 20^2, 28^2, 32^2, ∞^{39}	0^{13}, 1^6, 2^6, $\frac{7}{3}^{12}$, 4^{11}, $\frac{19}{4}^4$, 5^4, $\frac{23}{4}^4$, 6^2, $\frac{23}{3}^{27}$, $\frac{35}{4}^4$, $\frac{39}{4}^4$, 10^4, 12^5, 16^3, 17^2, 18^2, 20^2, 32^2, ∞^{156}	0^{40}, 1^{19}, 2^{18}, $\frac{7}{3}^{30}$, 4^{32}, $\frac{19}{4}^{16}$, 5^{16}, $\frac{23}{4}^{16}$, 6^8, $\frac{23}{3}^{54}$, $\frac{35}{4}^8$, 9^1, $\frac{39}{4}^8$, 10^{10}, 12^{12}, 13^{118}, 16^6, 17^4, 18^4, 20^4, 28^2, 32^4, ∞^{390}
40	0^{13}, $\frac{4}{3}^6$, 2^3, $\frac{8}{3}^6$, 4^6, $\frac{9}{2}^4$, 10^1, 12^2	0^{40}, $\frac{4}{3}^{27}$, 2^9, $\frac{8}{3}^{24}$, 4^{21}, $\frac{9}{2}^{20}$, 5^6, $\frac{16}{3}^9$, 6^{18}, $\frac{13}{2}^6$, 8^{28}, $\frac{17}{2}^2$, 9^2, 10^9, $\frac{21}{2}^2$, 12^8, $\frac{25}{2}^2$, 16^2, $\frac{52}{3}^3$, 18^1, 20^3, 26^1, 28^1, 32^2, ∞^{41}	0^{14}, $\frac{4}{3}^9$, 2^3, $\frac{8}{3}^{12}$, 4^7, $\frac{9}{2}^8$, 5^2, $\frac{16}{3}^3$, 6^6, $\frac{13}{2}^2$, 8^{28}, $\frac{17}{2}^2$, 9^2, 10^7, $\frac{21}{2}^2$, 12^3, $\frac{25}{2}^2$, 16^2, $\frac{52}{3}^3$, 18^1, 20^3, 32^2, ∞^{164}	0^{41}, $\frac{4}{3}^{30}$, 2^9, $\frac{8}{3}^{30}$, 4^{22}, $\frac{9}{2}^{24}$, 5^8, $\frac{16}{3}^{12}$, 6^{24}, $\frac{13}{2}^8$, 8^{56}, $\frac{17}{2}^4$, 9^4, 10^{15}, $\frac{21}{2}^4$, 12^9, $\frac{25}{2}^4$, $\frac{40}{3}^{123}$, 16^4, $\frac{52}{3}^6$, 18^2, 20^6, 26^1, 28^1, 32^4, ∞^{410}
41	0^{13}, 1^6, $\frac{5}{3}^6$, 3^8, 4^5, 5^2, 11^1, 12^1, 15^1	0^{41}, 1^{19}, $\frac{5}{3}^{27}$, 3^{32}, 4^{17}, 5^{13}, $\frac{17}{3}^9$, 6^6, $\frac{25}{4}^{12}$, $\frac{13}{2}^{12}$, 8^3, $\frac{25}{3}^{27}$, 9^2, 10^2, $\frac{41}{4}^8$, $\frac{21}{2}^4$, 11^3, 12^5, 13^1, 15^2, 16^2, 17^1, $\frac{53}{3}^3$, 19^1, 20^2, 27^1, 31^1, 32^2, ∞^{43}	0^{14}, 1^7, $\frac{5}{3}^9$, 3^{15}, 4^6, 5^5, $\frac{17}{3}^3$, 6^2, $\frac{25}{4}^4$, $\frac{13}{2}^4$, 8^1, $\frac{25}{3}^{27}$, 9^2, 10^2, $\frac{41}{4}^8$, $\frac{21}{2}^4$, 11^1, 12^2, 13^1, 15^1, 16^2, 17^1, $\frac{53}{3}^3$, 19^1, 20^2, 32^2, ∞^{172}	0^{42}, 1^{20}, $\frac{5}{3}^{30}$, 3^{39}, 4^{18}, 5^{16}, $\frac{17}{3}^{12}$, 6^8, $\frac{25}{4}^{16}$, $\frac{13}{2}^{16}$, 8^4, $\frac{25}{3}^{54}$, 9^4, 10^4, $\frac{41}{4}^{16}$, $\frac{21}{2}^8$, 11^3, 12^6, 13^2, $\frac{41}{3}^{129}$, 15^2, 16^4, 17^2, $\frac{53}{3}^6$, 19^2, 20^4, 27^1, 31^1, 32^4, ∞^{430}

42	0^{13}, $\frac{3}{2}^{12}$, 2^2, $\frac{5}{2}^4$, $\frac{10}{3}^6$, 4^1, $\frac{11}{2}^4$, 8^1, 12^1, 14^1	0^{42}, $\frac{3}{2}^{38}$, 2^9, $\frac{5}{2}^{18}$, $\frac{10}{3}^{30}$, 4^4, $\frac{11}{2}^{20}$, 6^9, $\frac{13}{2}^6$, $\frac{55}{8}^{24}$, 8^5, $\frac{17}{2}^2$, $\frac{26}{3}^{24}$, $\frac{19}{2}^2$, 10^2, $\frac{21}{2}^6$, $\frac{87}{8}^8$, 12^3, $\frac{27}{2}^2$, 14^2, 16^2, $\frac{35}{2}^2$, 18^1, $\frac{37}{2}^2$, 20^1, 24^1, 28^1, 30^1, 32^3, ∞^{45}	0^{14}, $\frac{3}{2}^{14}$, 2^3, $\frac{5}{2}^6$, $\frac{10}{3}^{15}$, 4^1, $\frac{11}{2}^8$, 6^3, $\frac{13}{2}^2$, $\frac{55}{8}^8$, 8^2, $\frac{17}{2}^2$, $\frac{26}{3}^{24}$, $\frac{19}{2}^2$, 10^2, $\frac{21}{2}^6$, $\frac{87}{8}^8$, 12^1, $\frac{27}{2}^2$, 14^1, 16^2, $\frac{35}{2}^2$, 18^1, $\frac{37}{2}^2$, 20^1, 32^3, ∞^{180}	0^{43}, $\frac{3}{2}^{40}$, 2^{10}, $\frac{5}{2}^{20}$, $\frac{10}{3}^{39}$, 4^4, $\frac{11}{2}^{24}$, 6^{12}, $\frac{13}{2}^8$, $\frac{55}{8}^{32}$, 8^6, $\frac{17}{2}^4$, $\frac{26}{3}^{48}$, $\frac{19}{2}^4$, 10^4, $\frac{21}{2}^{12}$, $\frac{87}{8}^{16}$, 12^3, $\frac{27}{2}^4$, 14^{138}, 16^4, $\frac{35}{2}^4$, 18^2, $\frac{37}{2}^4$, 20^2, 24^1, 28^1, 30^1, 32^6, ∞^{450}
43	0^{14}, 1^6, 2^6, $\frac{11}{4}^8$, $\frac{11}{3}^6$, 5^1, 6^2, 8^2, 13^2	0^{43}, 1^{20}, 2^{19}, $\frac{11}{4}^{36}$, $\frac{11}{3}^{36}$, 5^4, 6^{19}, $\frac{27}{4}^{12}$, 7^6, $\frac{29}{4}^{12}$, 8^7, $\frac{35}{4}^4$, 9^{25}, 10^4, $\frac{43}{4}^8$, 11^2, $\frac{45}{4}^4$, 13^5, 14^1, 16^1, 17^1, 18^1, $\frac{75}{4}^4$, 21^1, 24^2, 29^2, 32^3, 33^1, ∞^{47}	0^{15}, 1^7, 2^7, $\frac{11}{4}^{12}$, $\frac{11}{3}^{18}$, 5^1, 6^7, $\frac{27}{4}^4$, 7^2, $\frac{29}{4}^4$, 8^3, $\frac{35}{4}^4$, 9^{25}, 10^4, $\frac{43}{4}^8$, 11^2, $\frac{45}{4}^4$, 13^2, 14^1, 16^1, 17^1, 18^1, $\frac{75}{4}^4$, 21^1, 32^3, 33^1, ∞^{188}	0^{44}, 1^{21}, 2^{20}, $\frac{11}{4}^{40}$, $\frac{11}{3}^{48}$, 5^4, 6^{24}, $\frac{27}{4}^{16}$, 7^8, $\frac{29}{4}^{16}$, 8^8, $\frac{35}{4}^8$, 9^{50}, 10^8, $\frac{43}{4}^{16}$, 11^4, $\frac{45}{4}^8$, 13^5, 14^2, $\frac{43}{3}^{141}$, 16^2, 17^2, 18^2, $\frac{75}{4}^8$, 21^2, 24^2, 29^2, 32^6, 33^2, ∞^{471}
44	0^{14}, $\frac{4}{3}^9$, 2^3, $\frac{5}{2}^4$, 3^4, 4^7, 6^3, 8^3, 14^2	0^{44}, $\frac{4}{3}^{30}$, 2^{10}, $\frac{5}{2}^{18}$, 3^{18}, 4^{40}, 6^9, $\frac{13}{2}^{12}$, 7^6, $\frac{22}{3}^{18}$, 8^{14}, $\frac{17}{2}^8$, 9^2, $\frac{28}{3}^{24}$, $\frac{21}{2}^4$, 11^{10}, $\frac{34}{3}^6$, $\frac{25}{2}^2$, 14^5, 16^1, 18^1, $\frac{37}{2}^2$, 19^2, 22^2, 24^2, 30^2, 32^3, 34^1, ∞^{49}	0^{15}, $\frac{4}{3}^{12}$, 2^3, $\frac{5}{2}^6$, 3^6, 4^{20}, 6^3, $\frac{13}{2}^4$, 7^2, $\frac{22}{3}^6$, 8^5, $\frac{17}{2}^4$, 9^2, $\frac{28}{3}^{24}$, $\frac{21}{2}^4$, 11^{10}, $\frac{34}{3}^6$, $\frac{25}{2}^2$, 14^2, 16^1, 18^1, $\frac{37}{2}^2$, 19^2, 22^1, 24^1, 32^3, 34^1, ∞^{197}	0^{45}, $\frac{4}{3}^{33}$, 2^{10}, $\frac{5}{2}^{20}$, 3^{20}, 4^{53}, 6^9, $\frac{13}{2}^{16}$, 7^8, $\frac{22}{3}^{24}$, 8^{16}, $\frac{17}{2}^{12}$, 9^4, $\frac{28}{3}^{48}$, $\frac{21}{2}^8$, 11^{20}, $\frac{34}{3}^{12}$, $\frac{25}{2}^4$, 14^5, $\frac{44}{3}^{147}$, 16^2, 18^2, $\frac{37}{2}^4$, 19^4, 22^3, 24^3, 30^2, 32^6, 34^2, ∞^{493}
45	0^{14}, 1^6, $\frac{5}{3}^9$, 3^6, 4^2, $\frac{13}{3}^6$, 7^2, 8^4, 15^2	0^{45}, 1^{21}, $\frac{5}{3}^{30}$, 3^{27}, 4^9, $\frac{13}{3}^{42}$, 7^{20}, $\frac{23}{3}^{18}$, 8^{16}, 9^{11}, $\frac{37}{4}^4$, $\frac{29}{3}^{21}$, 11^4, $\frac{45}{4}^8$, $\frac{23}{2}^4$, $\frac{35}{3}^6$, 13^2, 15^4, 16^1, 17^1, 19^3, 20^1, 23^1, 24^3, 31^2, 32^4, 33^1, ∞^{51}	0^{15}, 1^7, $\frac{5}{3}^{12}$, 3^9, 4^3, $\frac{13}{3}^{21}$, 7^7, $\frac{23}{3}^6$, 8^6, 9^5, $\frac{37}{4}^4$, $\frac{29}{3}^{21}$, 11^4, $\frac{45}{4}^8$, $\frac{23}{2}^4$, $\frac{35}{3}^6$, 13^2, 15^2, 16^1, 17^1, 19^3, 20^1, 24^1, 32^4, 33^1, ∞^{206}	0^{46}, 1^{22}, $\frac{5}{3}^{33}$, 3^{30}, 4^{10}, $\frac{13}{3}^{57}$, 7^{25}, $\frac{23}{3}^{24}$, 8^{18}, 9^{16}, $\frac{37}{4}^8$, $\frac{29}{3}^{42}$, 11^8, $\frac{45}{4}^{16}$, $\frac{23}{2}^8$, $\frac{35}{3}^{12}$, 13^4, 15^{158}, 16^2, 17^2, 19^6, 20^2, 23^1, 24^4, 31^2, 32^8, 33^2, ∞^{515}
46	0^{15}, $\frac{3}{2}^{12}$, 2^6, $\frac{7}{2}^4$, 4^4, $\frac{14}{3}^6$, 8^5, 16^2	0^{46}, $\frac{3}{2}^{42}$, 2^{25}, $\frac{7}{2}^{18}$, 4^{14}, $\frac{14}{3}^{48}$, $\frac{15}{2}^{18}$, 8^{24}, $\frac{17}{2}^8$, $\frac{19}{2}^{12}$, 10^{19}, $\frac{23}{2}^{14}$, $\frac{95}{8}^8$, 12^2, $\frac{25}{2}^2$, 16^4, $\frac{35}{2}^2$, $\frac{39}{2}^2$, 20^2, 24^4, 32^6, $\frac{67}{2}^2$, ∞^{54}	0^{16}, $\frac{3}{2}^{14}$, 2^{10}, $\frac{7}{2}^6$, 4^5, $\frac{14}{3}^{24}$, $\frac{15}{2}^6$, 8^9, $\frac{17}{2}^4$, $\frac{19}{2}^8$, 10^{19}, $\frac{23}{2}^{14}$, $\frac{95}{8}^8$, 12^2, $\frac{25}{2}^2$, 16^2, $\frac{35}{2}^2$, $\frac{39}{2}^2$, 20^1, 24^1, 32^4, $\frac{67}{2}^2$, ∞^{215}	0^{47}, $\frac{3}{2}^{44}$, 2^{29}, $\frac{7}{2}^{20}$, 4^{15}, $\frac{14}{3}^{66}$, $\frac{15}{2}^{24}$, 8^{28}, $\frac{17}{2}^{12}$, $\frac{19}{2}^{20}$, 10^{38}, $\frac{23}{2}^{28}$, $\frac{95}{8}^{16}$, 12^4, $\frac{25}{2}^4$, $\frac{46}{3}^{162}$, 16^4, $\frac{35}{2}^4$, $\frac{39}{2}^4$, 20^3, 24^5, 32^{10}, $\frac{67}{2}^4$, ∞^{537}

47	0^{15}, 1^7, 2^6, $\frac{7}{3}^6$, 4^{10}, 5^4, 8^6, 9^1, 17^1	0^{47}, 1^{22}, 2^{21}, $\frac{7}{3}^{30}$, 4^{37}, 5^{46}, 8^{37}, $\frac{35}{4}^{16}$, 9^5, $\frac{39}{4}^4$, 10^5, $\frac{31}{3}^{18}$, $\frac{47}{4}^{12}$, 12^8, $\frac{49}{4}^4$, $\frac{51}{4}^4$, 17^2, 18^1, 20^5, 24^4, 25^1, 32^4, 33^2, 34^1, ∞^{56}	0^{16}, 1^8, 2^7, $\frac{7}{3}^{12}$, 4^{13}, 5^{23}, 8^{13}, $\frac{35}{4}^8$, 9^2, $\frac{39}{4}^4$, 10^3, $\frac{31}{3}^{18}$, $\frac{47}{4}^{12}$, 12^8, $\frac{49}{4}^4$, $\frac{51}{4}^4$, 17^1, 18^1, 20^3, 24^2, 32^4, 33^1, 34^1, ∞^{224}	0^{48}, 1^{23}, 2^{22}, $\frac{7}{3}^{36}$, 4^{40}, 5^{65}, 8^{44}, $\frac{35}{4}^{24}$, 9^6, $\frac{39}{4}^8$, 10^8, $\frac{31}{3}^{36}$, $\frac{47}{4}^{24}$, 12^{16}, $\frac{49}{4}^8$, $\frac{51}{4}^8$, $\frac{47}{3}^{168}$, 17^2, 18^2, 20^8, 24^6, 25^1, 32^8, 33^3, 34^2, ∞^{560}
48	0^{15}, $\frac{4}{3}^9$, 2^4, $\frac{8}{3}^6$, 4^8, $\frac{9}{2}^4$, $\frac{16}{3}^3$, 8^7, 10^1, 18^1	0^{48}, $\frac{4}{3}^{33}$, 2^{11}, $\frac{8}{3}^{30}$, 4^{26}, $\frac{9}{2}^{18}$, $\frac{16}{3}^{48}$, 8^{24}, $\frac{17}{2}^{14}$, 9^8, $\frac{28}{3}^9$, 10^8, $\frac{21}{2}^2$, $\frac{32}{3}^{15}$, 12^{13}, $\frac{37}{3}^{12}$, $\frac{25}{2}^4$, 13^6, 18^3, 20^2, $\frac{41}{2}^2$, 24^5, 26^1, 32^5, 34^2, 36^1, ∞^{58}	0^{16}, $\frac{4}{3}^{12}$, 2^4, $\frac{8}{3}^{12}$, 4^9, $\frac{9}{2}^6$, $\frac{16}{3}^{24}$, 8^9, $\frac{17}{2}^6$, 9^4, $\frac{28}{3}^3$, 10^7, $\frac{21}{2}^2$, $\frac{32}{3}^{15}$, 12^{11}, $\frac{37}{3}^{12}$, $\frac{25}{2}^4$, 13^6, 18^1, 20^1, $\frac{41}{2}^2$, 24^2, 32^5, 34^1, 36^1, ∞^{233}	0^{49}, $\frac{4}{3}^{36}$, 2^{11}, $\frac{8}{3}^{36}$, 4^{27}, $\frac{9}{2}^{20}$, $\frac{16}{3}^{69}$, 8^{26}, $\frac{17}{2}^{20}$, 9^{12}, $\frac{28}{3}^{12}$, 10^{14}, $\frac{21}{2}^4$, $\frac{32}{3}^{30}$, 12^{24}, $\frac{37}{3}^{24}$, $\frac{25}{2}^8$, 13^{12}, 16^{175}, 18^3, 20^3, $\frac{41}{2}^4$, 24^7, 26^1, 32^{10}, 34^3, 36^2, ∞^{583}
49	0^{16}, 1^7, $\frac{5}{3}^9$, 3^9, 4^6, 5^2, $\frac{17}{3}^3$, 8^6, 9^2, 19^1	0^{49}, 1^{23}, $\frac{5}{3}^{33}$, 3^{40}, 4^{21}, 5^9, $\frac{17}{3}^{54}$, 8^{22}, 9^{21}, $\frac{29}{3}^9$, 10^2, $\frac{41}{4}^4$, $\frac{21}{4}^4$, 11^{13}, 12^5, $\frac{49}{4}^8$, $\frac{25}{2}^4$, $\frac{38}{3}^{12}$, 13^4, $\frac{53}{4}^4$, 16^1, 19^3, 20^1, 21^1, 23^1, 24^4, 25^2, 31^1, 32^5, 33^2, 35^1, 36^1, ∞^{61}	0^{17}, 1^8, $\frac{5}{3}^{12}$, 3^{16}, 4^7, 5^3, $\frac{17}{3}^{27}$, 8^8, 9^9, $\frac{29}{3}^3$, 10^2, $\frac{41}{4}^4$, $\frac{21}{4}^4$, 11^{13}, 12^3, $\frac{49}{4}^8$, $\frac{25}{2}^4$, $\frac{38}{3}^{12}$, 13^4, $\frac{53}{4}^4$, 16^1, 19^1, 20^1, 21^1, 24^2, 32^5, 33^2, 36^1, ∞^{243}	0^{50}, 1^{24}, $\frac{5}{3}^{36}$, 3^{47}, 4^{22}, 5^{10}, $\frac{17}{3}^{78}$, 8^{24}, 9^{28}, $\frac{29}{3}^{12}$, 10^4, $\frac{41}{4}^8$, $\frac{21}{4}^8$, 11^{26}, 12^8, $\frac{49}{4}^{16}$, $\frac{25}{2}^8$, $\frac{38}{3}^{24}$, 13^8, $\frac{53}{4}^8$, 16^2, $\frac{49}{3}^{183}$, 19^3, 20^2, 21^2, 23^1, 24^6, 25^2, 31^1, 32^{10}, 33^4, 35^1, 36^2, ∞^{607}
50	0^{16}, $\frac{3}{2}^{14}$, 2^3, $\frac{5}{2}^6$, $\frac{10}{3}^6$, 4^2, $\frac{9}{2}^2$, $\frac{11}{2}^4$, 6^1, 8^5, $\frac{19}{2}^4$	0^{50}, $\frac{3}{2}^{46}$, 2^{11}, $\frac{5}{2}^{22}$, $\frac{10}{3}^{30}$, 4^5, $\frac{9}{2}^{10}$, $\frac{11}{2}^{18}$, 6^{55}, 8^{20}, $\frac{19}{2}^{22}$, 10^5, $\frac{21}{2}^8$, $\frac{87}{8}^8$, $\frac{34}{3}^{12}$, 12^2, $\frac{25}{2}^{10}$, $\frac{103}{8}^8$, 13^4, $\frac{105}{8}^8$, $\frac{27}{2}^2$, 16^2, 20^1, $\frac{43}{2}^2$, 22^1, 24^3, $\frac{51}{2}^4$, 30^1, 32^5, $\frac{67}{2}^4$, ∞^{63}	0^{17}, $\frac{3}{2}^{16}$, 2^4, $\frac{5}{2}^8$, $\frac{10}{3}^{12}$, 4^2, $\frac{9}{2}^4$, $\frac{11}{2}^6$, 6^{29}, 8^7, $\frac{19}{2}^{10}$, 10^3, $\frac{21}{2}^4$, $\frac{87}{8}^8$, $\frac{34}{3}^{12}$, 12^2, $\frac{25}{2}^{10}$, $\frac{103}{8}^8$, 13^4, $\frac{105}{8}^8$, $\frac{27}{2}^2$, 16^1, $\frac{43}{2}^2$, 24^2, 32^5, $\frac{67}{2}^4$, ∞^{252}	0^{51}, $\frac{3}{2}^{48}$, 2^{12}, $\frac{5}{2}^{24}$, $\frac{10}{3}^{36}$, 4^5, $\frac{9}{2}^{12}$, $\frac{11}{2}^{20}$, 6^{83}, 8^{22}, $\frac{19}{2}^{28}$, 10^8, $\frac{21}{2}^{12}$, $\frac{87}{8}^{16}$, $\frac{34}{3}^{24}$, 12^4, $\frac{25}{2}^{20}$, $\frac{103}{8}^{16}$, 13^8, $\frac{105}{8}^{16}$, $\frac{27}{2}^4$, 16^3, $\frac{50}{3}^{189}$, 20^1, $\frac{43}{2}^4$, 22^1, 24^5, $\frac{51}{2}^4$, 30^1, 32^{10}, $\frac{67}{2}^8$, ∞^{631}

2 $q = 3$.

2.1 $i = 1$.

Table 3: Slopes for $q = 3$, $i = 1$, type 0. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
1				
3				0^1
5				$\frac{4}{3}^3$
7		∞^1	0^1	$0^1, \frac{8}{3}^3, \infty^2$
9		∞^2	$0^1, 4^1$	$0^1, 4^5, \infty^4$
11		$4^1, \infty^2$	$2^2, 4^1$	$2^2, 4^2, \frac{16}{3}^6, \infty^5$
13		$5^2, \infty^2$	$0^1, 4^1, 5^2$	$0^1, 4^1, 5^4, \frac{20}{3}^9, \infty^6$
15		$6^1, 8^1, \infty^4$	$0^1, 2^2, 6^1, 8^1, 16^1$	$0^1, 2^2, 6^2, 8^{12}, 16^1, \infty^{10}$
17		$7^2, 8^1, \infty^5$	$\frac{4}{3}^3, 4^1, 7^2, 8^1, 16^1$	$\frac{4}{3}^3, 4^1, 7^4, 8^2, \frac{28}{3}^{12}, 16^1, \infty^{13}$
19		$8^4, 12^1, \infty^5$	$0^1, \frac{8}{3}^3, 8^4, 12^1, 16^1$	$0^1, \frac{8}{3}^3, 8^8, \frac{32}{3}^{15}, 12^2, 16^1, \infty^{15}$
21		$9^2, 10^2, \frac{32}{3}^3, \infty^5$	$0^1, 2^2, 4^1, 9^2, 10^2, \frac{32}{3}^3, 16^1$	$0^1, 2^2, 4^1, 9^4, 10^4, \frac{32}{3}^6, 12^{19}, 16^1, \infty^{17}$
23	4^1	$4^1, 10^1, \frac{21}{2}^4, 16^1, \infty^8$	$\frac{4}{3}^3, 4^3, 10^1, \frac{21}{2}^4, 16^3, \infty^1$	$\frac{4}{3}^3, 4^3, 10^2, \frac{21}{2}^8, \frac{40}{3}^{24}, 16^4, \infty^{22}$
25	6^1	$6^1, 11^4, 12^3, \infty^{10}$	$0^1, \frac{8}{3}^3, 6^4, 11^4, 12^3, 16^2, \infty^1$	$0^1, \frac{8}{3}^3, 6^4, 11^8, 12^6, \frac{44}{3}^{27}, 16^2, \infty^{27}$
27	8^1	$8^1, 12^3, \frac{25}{2}^4, 13^2, \infty^{11}$	$0^1, 4^5, 8^3, 12^3, \frac{25}{2}^4, 13^2, 16^2, \infty^1$	$0^1, 4^5, 8^3, 12^6, \frac{25}{2}^8, 13^4, 16^{33}, \infty^{31}$
29	4^1	$4^1, 13^2, \frac{40}{3}^3, \frac{27}{2}^4, 14^2, \infty^{12}$	$2^2, 4^2, \frac{16}{3}^3, 8^2, 10^2, 13^2, \frac{40}{3}^3, \frac{27}{2}^4, 14^2, 16^1, \infty^1$	$2^2, 4^2, \frac{16}{3}^3, 8^2, 10^2, 13^4, \frac{40}{3}^6, \frac{27}{2}^8, 14^4, 16^1, \frac{52}{3}^{36}, \infty^{35}$
31	5^2	$5^2, 14^4, \frac{44}{3}^3, 15^4, \infty^{15}$	$0^1, 4^1, 5^4, \frac{20}{3}^3, 9^4, 12^1, 14^4, \frac{44}{3}^3, 15^4, 16^1, \infty^2$	$0^1, 4^1, 5^4, \frac{20}{3}^3, 9^4, 12^1, 14^8, \frac{44}{3}^6, 15^8, 16^1, \frac{56}{3}^{42}, \infty^{41}$
33	$6^1, 8^1$	$6^1, 8^1, 15^2, \frac{31}{2}^8, 16^1, 26^1, \infty^{18}$	$0^1, 2^2, 6^2, 8^8, 10^2, 15^2, \frac{31}{2}^8, 16^2, 20^1, 26^1, 52^1, \infty^2$	$0^1, 2^2, 6^2, 8^8, 10^2, 15^4, \frac{31}{2}^{16}, 16^3, 20^{47}, 26^2, 52^1, \infty^{48}$

35	8^1, 10^1	8^1, 10^1, 16^3, $\frac{49}{3}^6$, 17^4, 26^1, ∞^{20}	$\frac{4}{3}^3$, 4^1, 8^4, $\frac{28}{3}^3$, 10^2, 11^4, 16^3, $\frac{49}{3}^6$, 17^4, 22^2, 26^1, 52^1, ∞^2	$\frac{4}{3}^3$, 4^1, 8^4, $\frac{28}{3}^3$, 10^2, 11^4, 16^6, $\frac{49}{3}^{12}$, 17^8, $\frac{64}{3}^{51}$, 22^2, 26^2, 52^1, ∞^{54}
37	11^2	11^2, 17^6, $\frac{53}{3}^6$, 18^1, 21^2, 28^1, 30^1, ∞^{21}	0^1, $\frac{8}{3}^3$, 10^2, $\frac{32}{3}^3$, 11^4, 12^2, 16^1, 17^6, $\frac{53}{3}^6$, 18^3, 21^2, 24^1, 28^2, 30^1, 52^1, ∞^2	0^1, $\frac{8}{3}^3$, 10^2, $\frac{32}{3}^3$, 11^4, 12^2, 16^1, 17^{12}, $\frac{53}{3}^{12}$, 18^4, 21^4, $\frac{68}{3}^{57}$, 24^1, 28^3, 30^2, 52^1, ∞^{59}
39	12^1, 14^1, 20^1	12^1, 14^1, 18^3, $\frac{37}{2}^4$, 19^4, 20^2, 22^2, $\frac{68}{3}^3$, 26^1, ∞^{24}	0^1, 2^2, 4^1, 8^2, 12^3, 13^4, 14^4, 16^1, 18^3, $\frac{37}{2}^4$, 19^4, 20^5, 22^2, $\frac{68}{3}^3$, 26^1, 28^1, 52^1, ∞^3	0^1, 2^2, 4^1, 8^2, 12^3, 13^4, 14^4, 16^1, 18^6, $\frac{37}{2}^8$, 19^8, 20^6, 22^4, $\frac{68}{3}^6$, 24^{64}, 26^2, 28^1, 52^1, ∞^{66}
41	4^1, 14^2	4^1, 14^2, 19^4, $\frac{58}{3}^3$, $\frac{39}{2}^4$, 20^2, 22^1, 23^2, 26^1, 28^1, 34^1, ∞^{28}	$\frac{4}{3}^3$, 4^3, 8^2, 10^2, 14^6, $\frac{46}{3}^6$, 16^1, 19^4, $\frac{58}{3}^3$, $\frac{39}{2}^4$, 20^2, 22^3, 23^2, 26^1, 28^1, 34^1, 36^1, 52^2, ∞^3	$\frac{4}{3}^3$, 4^3, 8^2, 10^2, 14^6, $\frac{46}{3}^6$, 16^1, 19^8, $\frac{58}{3}^6$, $\frac{39}{2}^8$, 20^4, 22^4, 23^4, $\frac{76}{3}^{69}$, 26^2, 28^2, 34^2, 36^1, 52^2, ∞^{75}
43	6^1, 16^1, 18^1	6^1, 16^1, 18^1, 20^8, $\frac{62}{3}^3$, 21^4, $\frac{43}{2}^4$, 27^2, 36^1, ∞^{30}	0^1, $\frac{8}{3}^3$, 6^4, 9^4, 16^3, $\frac{50}{3}^6$, 18^6, 20^8, $\frac{62}{3}^3$, 21^4, $\frac{43}{2}^4$, 27^2, 36^2, 52^2, ∞^3	0^1, $\frac{8}{3}^3$, 6^4, 9^4, 16^3, $\frac{50}{3}^6$, 18^6, 20^{16}, $\frac{62}{3}^6$, 21^8, $\frac{43}{2}^8$, $\frac{80}{3}^{75}$, 27^4, 36^3, 52^2, ∞^{82}
45	8^1, 18^1, 22^1	8^1, 18^1, 21^4, $\frac{43}{2}^8$, 22^9, 23^2, 26^1, 28^1, 37^2, ∞^{31}	0^1, 4^5, 8^5, 10^2, 18^4, 19^8, 20^1, 21^4, $\frac{43}{2}^8$, 22^{10}, 23^2, 26^1, 28^1, 37^2, 40^1, 52^2, ∞^3	0^1, 4^5, 8^5, 10^2, 18^4, 19^8, 20^1, 21^8, $\frac{43}{2}^{16}$, 22^{18}, 23^4, 26^2, 28^{84}, 37^4, 40^1, 52^2, ∞^{88}
47	4^1, 10^1, 20^2	4^1, 10^1, 20^2, 22^3, $\frac{67}{3}^6$, $\frac{45}{2}^4$, 23^4, $\frac{70}{3}^3$, $\frac{49}{2}^4$, 26^1, 28^1, 38^1, 40^1, ∞^{34}	2^2, 4^2, $\frac{16}{3}^6$, 10^6, 16^1, 20^8, $\frac{64}{3}^3$, 22^7, $\frac{67}{3}^6$, $\frac{45}{2}^4$, 23^4, $\frac{70}{3}^3$, $\frac{49}{2}^4$, 26^1, 28^1, 38^1, 40^1, 52^2, ∞^4	2^2, 4^2, $\frac{16}{3}^6$, 10^6, 16^1, 20^8, $\frac{64}{3}^3$, 22^{10}, $\frac{67}{3}^{12}$, $\frac{45}{2}^8$, 23^8, $\frac{70}{3}^6$, $\frac{49}{2}^8$, 26^2, 28^2, $\frac{88}{3}^{90}$, 38^2, 40^2, 52^2, ∞^{96}
49	5^2, 12^2, 22^1	5^2, 12^2, 22^1, 23^8, $\frac{71}{3}^6$, 24^4, $\frac{74}{3}^3$, 26^2, 27^2, 30^1, 36^1, 40^1, ∞^{39}	0^1, 4^1, 5^4, $\frac{20}{3}^9$, 12^7, 16^1, 22^4, $\frac{68}{3}^3$, 23^{12}, $\frac{71}{3}^6$, 24^6, $\frac{74}{3}^3$, 26^2, 27^2, 30^1, 36^1, 40^1, 52^3, ∞^5	0^1, 4^1, 5^4, $\frac{20}{3}^9$, 12^7, 16^1, 22^4, $\frac{68}{3}^3$, 23^{20}, $\frac{71}{3}^{12}$, 24^{10}, $\frac{74}{3}^6$, 26^4, 27^4, 30^2, $\frac{92}{3}^{99}$, 36^2, 40^2, 52^3, ∞^{106}

51	6^1, 8^1, 14^2, 26^1	6^1, 8^1, 14^2, 24^5, $\frac{49}{2}^{12}$, 25^2, 26^6, 28^3, 32^2, 37^2, ∞^{42}	0^1, 2^2, 6^2, 8^{12}, 14^8, 16^2, 24^8, $\frac{49}{2}^{12}$, 25^6, 26^9, 28^3, 32^2, 37^2, 52^3, 56^1, ∞^5	0^1, 2^2, 6^2, 8^{12}, 14^8, 16^2, 24^{13}, $\frac{49}{2}^{24}$, 25^8, 26^{14}, 28^6, 32^{110}, 37^4, 52^3, 56^1, ∞^{115}
53	7^2, 8^1, 16^1, 26^1	7^2, 8^1, 16^1, 25^4, $\frac{76}{3}^{12}$, 26^8, $\frac{82}{3}^3$, 29^4, 34^2, 38^3, ∞^{44}	$\frac{4}{3}^3$, 4^1, 7^4, 8^4, $\frac{28}{3}^9$, 12^1, 16^8, 25^4, $\frac{76}{3}^{12}$, 26^{13}, $\frac{82}{3}^3$, 28^3, 29^4, 34^2, 38^3, 52^3, 58^2, ∞^5	$\frac{4}{3}^3$, 4^1, 7^4, 8^4, $\frac{28}{3}^9$, 12^1, 16^8, 25^8, $\frac{76}{3}^{24}$, 26^{20}, $\frac{82}{3}^6$, 28^3, 29^8, $\frac{100}{3}^{114}$, 34^4, 38^6, 52^3, 58^2, ∞^{123}
55	8^4, 12^1, 28^1	8^4, 12^1, 26^8, $\frac{80}{3}^{12}$, 27^2, 28^1, $\frac{57}{2}^4$, $\frac{86}{3}^3$, 30^3, 36^2, 39^2, 42^1, ∞^{48}	0^1, $\frac{8}{3}^3$, 8^8, 10^2, $\frac{32}{3}^{12}$, 12^3, 16^2, 18^4, 26^8, $\frac{80}{3}^{12}$, 27^2, 28^3, $\frac{57}{2}^4$, $\frac{86}{3}^3$, 29^4, 30^3, 36^2, 39^2, 40^1, 42^1, 52^3, 60^1, 64^1, ∞^6	0^1, $\frac{8}{3}^3$, 8^8, 10^2, $\frac{32}{3}^{12}$, 12^3, 16^2, 18^4, 26^{16}, $\frac{80}{3}^{24}$, 27^4, 28^3, $\frac{57}{2}^8$, $\frac{86}{3}^6$, 29^4, 30^6, $\frac{104}{3}^{123}$, 36^4, 39^4, 40^1, 42^2, 52^3, 60^1, 64^1, ∞^{133}
57	9^2, 10^2, $\frac{32}{3}^3$	9^2, 10^2, $\frac{32}{3}^3$, 27^4, $\frac{55}{2}^8$, 28^6, $\frac{86}{3}^6$, 29^2, 30^1, 31^4, 32^1, $\frac{98}{3}^3$, 38^1, 40^1, 42^1, ∞^{53}	0^1, 2^2, 4^1, 8^2, 9^4, 10^4, $\frac{32}{3}^6$, 12^{16}, 16^1, 20^3, 27^4, $\frac{55}{2}^8$, 28^6, $\frac{86}{3}^6$, 29^2, 30^3, 31^4, 32^3, $\frac{98}{3}^3$, $\frac{100}{3}^3$, 38^1, 40^1, 42^1, 52^4, 56^1, 64^1, ∞^7	0^1, 2^2, 4^1, 8^2, 9^4, 10^4, $\frac{32}{3}^6$, 12^{16}, 16^1, 20^3, 27^8, $\frac{55}{2}^{16}$, 28^{12}, $\frac{86}{3}^{12}$, 29^4, 30^4, 31^8, 32^4, $\frac{98}{3}^6$, $\frac{100}{3}^3$, 36^{133}, 38^2, 40^2, 42^2, 52^4, 56^1, 64^1, ∞^{144}
59	4^1, 10^1, $\frac{21}{2}^4$, 16^1	4^1, 10^1, $\frac{21}{2}^4$, 16^1, 28^5, $\frac{85}{3}^6$, $\frac{57}{2}^4$, 29^4, $\frac{61}{2}^4$, 31^2, $\frac{63}{2}^4$, 32^5, $\frac{100}{3}^3$, 38^1, 40^2, 42^1, ∞^{57}	$\frac{4}{3}^3$, 4^3, 8^2, 10^4, $\frac{21}{2}^8$, $\frac{40}{3}^{18}$, 16^3, 22^2, 28^5, $\frac{85}{3}^6$, $\frac{57}{2}^4$, 29^4, $\frac{61}{2}^4$, 31^2, $\frac{63}{2}^4$, 32^9, $\frac{100}{3}^3$, 36^1, 38^1, 40^3, 42^1, 52^4, $\frac{172}{3}^3$, 72^1, ∞^7	$\frac{4}{3}^3$, 4^3, 8^2, 10^4, $\frac{21}{2}^8$, $\frac{40}{3}^{18}$, 16^3, 22^2, 28^{10}, $\frac{85}{3}^{12}$, $\frac{57}{2}^8$, 29^8, $\frac{61}{2}^8$, 31^4, $\frac{63}{2}^8$, 32^{14}, $\frac{100}{3}^6$, 36^1, $\frac{112}{3}^{141}$, 38^2, 40^5, 42^2, 52^4, $\frac{172}{3}^3$, 72^1, ∞^{155}
61	6^1, 11^2, 12^3, 18^1	6^1, 11^2, 12^3, 18^1, 29^{10}, $\frac{89}{3}^6$, 30^3, $\frac{61}{2}^8$, $\frac{131}{4}^8$, 33^2, $\frac{104}{3}^3$, 36^1, 39^2, 42^2, ∞^{60}	0^1, $\frac{8}{3}^3$, 6^4, 9^4, 11^4, 12^6, $\frac{44}{3}^{18}$, 16^1, 18^2, 20^1, 24^3, 29^{10}, $\frac{89}{3}^6$, 30^3, $\frac{61}{2}^8$, $\frac{131}{4}^8$, 33^2, 34^2, $\frac{104}{3}^3$, 36^3, 39^2, 42^2, 52^4, $\frac{176}{3}^3$, 64^1, 72^1, ∞^7	0^1, $\frac{8}{3}^3$, 6^4, 9^4, 11^4, 12^6, $\frac{44}{3}^{18}$, 16^1, 18^2, 20^1, 24^3, 29^{20}, $\frac{89}{3}^{12}$, 30^6, $\frac{61}{2}^{16}$, $\frac{131}{4}^{16}$, 33^4, 34^2, $\frac{104}{3}^6$, 36^4, $\frac{116}{3}^{150}$, 39^4, 42^4, 52^4, $\frac{176}{3}^3$, 64^1, 72^1, ∞^{165}

63	$8^1, 12^1, \frac{25}{2}^4, 18^1, 22^1$	$8^1, 12^1, \frac{25}{2}^4, 18^1, 22^1, 30^5, \frac{61}{2}^4, 31^{16}, 32^4, \frac{65}{2}^4, 34^6, 36^4, 37^2, 42^1, 44^2, \infty^{64}$	$0^1, 4^5, 8^5, 10^2, 12^2, \frac{25}{2}^8, 16^{21}, 18^2, 22^4, 26^2, 30^5, \frac{61}{2}^4, 31^{16}, 32^4, \frac{65}{2}^4, 34^6, 36^5, 37^2, 40^2, 42^1, 44^2, 52^4, 56^1, 60^1, 64^2, 76^1, \infty^8$	$0^1, 4^5, 8^5, 10^2, 12^2, \frac{25}{2}^8, 16^{21}, 18^2, 22^4, 26^2, 30^{10}, \frac{61}{2}^8, 31^{32}, 32^8, \frac{65}{2}^8, 34^{12}, 36^9, 37^4, 40^{162}, 42^2, 44^4, 52^4, 56^1, 60^1, 64^2, 76^1, \infty^{176}$
65	$4^1, 10^1, \frac{40}{3}^3, 14^2, 20^2$	$4^1, 10^1, \frac{40}{3}^3, 14^2, 20^2, 31^6, \frac{94}{3}^3, \frac{63}{2}^8, 32^2, \frac{97}{3}^6, 33^4, \frac{67}{2}^8, \frac{69}{2}^4, 35^4, 38^1, 40^1, 42^1, 46^1, 52^1, \infty^{69}$	$2^2, 4^2, \frac{16}{3}^6, 10^6, \frac{40}{3}^6, 14^4, 16^1, 17^8, \frac{52}{3}^{12}, 20^4, 22^2, 24^1, 28^2, 31^6, \frac{94}{3}^3, \frac{63}{2}^8, 32^2, \frac{97}{3}^6, 33^4, \frac{67}{2}^8, \frac{69}{2}^4, 35^4, 36^1, 38^3, 40^1, 42^1, 46^1, 52^6, \frac{172}{3}^3, 64^1, 72^1, \infty^9$	$2^2, 4^2, \frac{16}{3}^6, 10^6, \frac{40}{3}^6, 14^4, 16^1, 17^8, \frac{52}{3}^{12}, 20^4, 22^2, 24^1, 28^2, 31^{12}, \frac{94}{3}^6, \frac{63}{2}^{16}, 32^4, \frac{97}{3}^{12}, 33^8, \frac{67}{2}^{16}, \frac{69}{2}^8, 35^8, 36^1, 38^4, 40^2, \frac{124}{3}^{171}, 42^2, 46^2, 52^7, \frac{172}{3}^3, 64^1, 72^1, \infty^{188}$
67	$5^2, 12^2, \frac{44}{3}^3, 18^1, 22^1$	$5^2, 12^2, \frac{44}{3}^3, 18^1, 22^1, 32^{12}, \frac{98}{3}^3, 33^8, \frac{101}{3}^6, \frac{137}{4}^8, 35^4, 36^7, 41^2, 44^1, 48^1, 52^1, \infty^{74}$	$0^1, 4^1, 5^4, \frac{20}{3}^9, 12^7, \frac{44}{3}^6, 16^1, 18^8, \frac{56}{3}^{15}, 22^2, 23^4, 28^1, 32^{12}, \frac{98}{3}^3, 33^8, \frac{101}{3}^6, \frac{137}{4}^8, 35^4, 36^8, 40^2, 41^2, 44^1, 48^1, 52^6, \frac{176}{3}^3, 60^2, 72^2, \infty^9$	$0^1, 4^1, 5^4, \frac{20}{3}^9, 12^7, \frac{44}{3}^6, 16^1, 18^8, \frac{56}{3}^{15}, 22^2, 23^4, 28^1, 32^{24}, \frac{98}{3}^6, 33^{16}, \frac{101}{3}^{12}, \frac{137}{4}^{16}, 35^8, 36^{15}, 40^2, 41^4, \frac{128}{3}^{180}, 44^2, 48^2, 52^7, \frac{176}{3}^3, 60^2, 72^2, \infty^{201}$
69	$6^1, 8^1, 14^2, 16^1, 18^1, 20^2, 26^1$	$6^1, 8^1, 14^2, 16^1, 18^1, 20^2, 26^1, 33^6, \frac{67}{2}^{16}, 34^1, 35^{14}, \frac{71}{2}^4, 37^8, 38^2, 40^3, 42^1, 44^1, 48^1, 52^1, \infty^{77}$	$0^1, 2^2, 6^2, 8^{12}, 14^8, 16^4, 18^2, 19^4, 20^{20}, 24^2, 26^4, 33^6, \frac{67}{2}^{16}, 34^1, 35^{14}, \frac{71}{2}^4, 36^1, 37^8, 38^4, 40^3, 42^1, 44^1, 48^1, 52^6, 56^1, 60^1, 61^4, 72^1, 80^1, \infty^9$	$0^1, 2^2, 6^2, 8^{12}, 14^8, 16^4, 18^2, 19^4, 20^{20}, 24^2, 26^4, 33^{12}, \frac{67}{2}^{32}, 34^2, 35^{28}, \frac{71}{2}^8, 36^1, 37^{16}, 38^6, 40^6, 42^2, 44^{192}, 48^2, 52^7, 56^1, 60^1, 61^4, 72^1, 80^1, \infty^{212}$
71	$7^2, 8^1, 16^2, \frac{58}{3}^3, 22^1, 26^1$	$7^2, 8^1, 16^2, \frac{58}{3}^3, 22^1, 26^1, 34^5, \frac{103}{3}^{12}, 35^{10}, 36^4, \frac{109}{3}^6, \frac{147}{4}^8, 38^5, \frac{79}{2}^8, 41^1, 46^2, 52^1, \infty^{81}$	$\frac{4}{3}^3, 4^1, 7^4, 8^2, \frac{28}{3}^{12}, 16^{10}, \frac{58}{3}^6, 20^6, \frac{64}{3}^{12}, 22^2, 25^4, 26^4, 34^5, \frac{103}{3}^{12}, 35^{10}, 36^5, \frac{109}{3}^6, \frac{147}{4}^8, 38^5, \frac{79}{2}^8, 40^1, 44^1, 46^2, 52^6, 58^2, 62^2, 64^3, 76^1, \infty^{10}$	$\frac{4}{3}^3, 4^1, 7^4, 8^2, \frac{28}{3}^{12}, 16^{10}, \frac{58}{3}^6, 20^6, \frac{64}{3}^{12}, 22^2, 25^4, 26^4, 34^{10}, \frac{103}{3}^{24}, 35^{20}, 36^9, \frac{109}{3}^{12}, \frac{147}{4}^{16}, 38^{10}, \frac{79}{2}^{16}, 40^1, 44^2, \frac{136}{3}^{201}, 46^4, 52^7, 58^2, 62^2, 64^3, 76^1, \infty^{224}$

73	8^4, 12^1, 18^2, $\frac{62}{3}^3$, 28^1	8^4, 12^1, 18^2, $\frac{62}{3}^3$, 28^1, 35^{12}, $\frac{107}{3}^{12}$, 36^1, $\frac{75}{2}^{12}$, $\frac{113}{3}^6$, 38^4, 39^6, 41^8, 42^1, 48^2, 56^1, ∞^{86}	0^1, $\frac{8}{3}^3$, 8^8, $\frac{32}{3}^{15}$, 12^2, 16^1, 18^{10}, $\frac{62}{3}^6$, 21^4, $\frac{68}{3}^9$, 26^8, 28^2, 30^2, 35^{12}, $\frac{107}{3}^{12}$, 36^1, $\frac{75}{2}^{12}$, $\frac{113}{3}^6$, 38^4, 39^6, 40^1, 41^8, 42^1, 48^2, 52^6, 56^1, 60^1, 64^2, 65^4, 76^1, ∞^{11}	0^1, $\frac{8}{3}^3$, 8^8, $\frac{32}{3}^{15}$, 12^2, 16^1, 18^{10}, $\frac{62}{3}^6$, 21^4, $\frac{68}{3}^9$, 26^8, 28^2, 30^2, 35^{24}, $\frac{107}{3}^{24}$, 36^2, $\frac{75}{2}^{24}$, $\frac{113}{3}^{12}$, 38^8, 39^{12}, 40^1, 41^{16}, 42^2, $\frac{140}{3}^{213}$, 48^4, 52^6, 56^2, 60^1, 64^2, 65^4, 76^1, ∞^{237}
75	9^2, 10^2, $\frac{32}{3}^3$, 20^3, 22^1, 26^1	9^2, 10^2, $\frac{32}{3}^3$, 20^3, 22^1, 26^1, 36^7, $\frac{73}{2}^8$, 37^8, $\frac{113}{3}^{12}$, 38^5, 39^2, $\frac{157}{4}^8$, $\frac{79}{2}^4$, 40^5, 42^1, 43^2, $\frac{134}{3}^3$, 56^1, 60^1, ∞^{92}	0^1, 2^2, 4^1, 9^4, 10^4, $\frac{32}{3}^6$, 12^{19}, 16^1, 20^{11}, 22^4, 24^7, 26^2, 27^4, 28^4, $\frac{86}{3}^6$, 36^7, $\frac{73}{2}^8$, 37^8, $\frac{113}{3}^{12}$, 38^5, 39^2, $\frac{157}{4}^8$, $\frac{79}{2}^4$, 40^5, 42^1, 43^2, $\frac{134}{3}^3$, 52^6, 56^3, 60^1, 64^1, 66^2, 68^2, $\frac{208}{3}^3$, ∞^{12}	0^1, 2^2, 4^1, 9^4, 10^4, $\frac{32}{3}^6$, 12^{19}, 16^1, 20^{11}, 22^4, 24^7, 26^2, 27^4, 28^4, $\frac{86}{3}^6$, 36^{14}, $\frac{73}{2}^{16}$, 37^{16}, $\frac{113}{3}^{24}$, 38^{10}, 39^4, $\frac{157}{4}^{16}$, $\frac{79}{2}^8$, 40^{10}, 42^2, 43^4, $\frac{134}{3}^6$, 48^{226}, 52^6, 56^4, 60^2, 64^1, 66^2, 68^2, $\frac{208}{3}^3$, ∞^{251}
77	4^1, 10^1, $\frac{21}{2}^4$, 16^1, 22^3, 26^1, 28^1	4^1, 10^1, $\frac{21}{2}^4$, 16^1, 22^3, 26^1, 28^1, 37^6, $\frac{112}{3}^9$, $\frac{75}{2}^8$, 38^4, 39^4, $\frac{79}{2}^{12}$, 40^1, $\frac{81}{2}^4$, $\frac{245}{6}^{12}$, 41^6, 42^1, 49^2, 58^2, 64^1, ∞^{96}	$\frac{4}{3}^3$, 4^3, 10^2, $\frac{21}{2}^8$, $\frac{40}{3}^{24}$, 16^4, 22^{12}, $\frac{76}{3}^6$, 26^2, 28^4, $\frac{57}{2}^8$, 34^2, 37^6, $\frac{112}{3}^9$, $\frac{75}{2}^8$, 38^4, 39^4, $\frac{79}{2}^{12}$, 40^1, $\frac{81}{2}^4$, $\frac{245}{6}^{12}$, 41^6, 42^1, 49^2, 52^6, $\frac{172}{3}^3$, 58^4, 64^1, 68^4, 76^1, 90^2, ∞^{12}	$\frac{4}{3}^3$, 4^3, 10^2, $\frac{21}{2}^8$, $\frac{40}{3}^{24}$, 16^4, 22^{12}, $\frac{76}{3}^6$, 26^2, 28^4, $\frac{57}{2}^8$, 34^2, 37^{12}, $\frac{112}{3}^{18}$, $\frac{75}{2}^{16}$, 38^8, 39^8, $\frac{79}{2}^{24}$, 40^2, $\frac{81}{2}^8$, $\frac{245}{6}^{24}$, 41^{12}, 42^2, 49^4, $\frac{148}{3}^{237}$, 52^6, $\frac{172}{3}^3$, 58^6, 64^2, 68^4, 76^1, 90^2, ∞^{264}
79	6^1, 11^4, 12^3, 24^3, 27^2	6^1, 11^4, 12^3, 24^3, 27^2, 38^{12}, $\frac{116}{3}^9$, 39^6, $\frac{79}{2}^8$, $\frac{161}{4}^8$, 42^{11}, $\frac{253}{6}^{12}$, $\frac{85}{2}^4$, 48^1, 51^2, 60^3, ∞^{101}	0^1, $\frac{8}{3}^3$, 6^4, 11^8, 12^6, $\frac{44}{3}^{27}$, 16^2, 24^{13}, $\frac{80}{3}^3$, 27^4, 29^4, 30^6, 36^1, 38^{12}, $\frac{116}{3}^9$, 39^6, $\frac{79}{2}^8$, $\frac{161}{4}^8$, 42^{11}, $\frac{253}{6}^{12}$, $\frac{85}{2}^4$, 48^1, 51^2, 52^6, $\frac{176}{3}^3$, 60^6, 64^1, 70^2, 72^1, 88^1, 90^2, ∞^{13}	0^1, $\frac{8}{3}^3$, 6^4, 11^8, 12^6, $\frac{44}{3}^{27}$, 16^2, 24^{13}, $\frac{80}{3}^3$, 27^4, 29^4, 30^6, 36^1, 38^{24}, $\frac{116}{3}^{18}$, 39^{12}, $\frac{79}{2}^{16}$, $\frac{161}{4}^{16}$, 42^{22}, $\frac{253}{6}^{24}$, $\frac{85}{2}^8$, 48^2, $\frac{152}{3}^{249}$, 51^4, 52^6, $\frac{176}{3}^3$, 60^9, 64^1, 70^2, 72^1, 88^1, 90^2, ∞^{278}

Table 4: Slopes for $q = 3$, $i = 1$, type 1. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
0				0^1
2		∞^1	0^1	0^1, ∞^2
4		2^1, ∞^1	0^1, 2^1	0^1, 2^2, ∞^3
6		3^2, ∞^1	0^1, 3^2	0^1, 3^4, 4^1, ∞^4
8		4^3, ∞^1	0^1, 4^3	0^1, 4^6, $\frac{16}{3}^3$, ∞^5
10	2^1	2^1, 5^2, ∞^3	0^1, 2^2, 5^2, ∞^1	0^1, 2^2, 5^4, $\frac{20}{3}^6$, ∞^8
12	4^1	4^1, 6^3, ∞^4	0^1, 4^3, 6^3, ∞^1	0^1, 4^3, 6^6, 8^7, ∞^{11}
14	6^1	6^1, 7^4, ∞^5	0^1, 6^4, 7^4, ∞^1	0^1, 6^4, 7^8, $\frac{28}{3}^9$, ∞^{14}
16	2^1	2^1, 8^5, ∞^6	0^1, 2^2, 8^8, ∞^1	0^1, 2^2, 8^{13}, $\frac{32}{3}^{12}$, ∞^{17}
18	3^2	3^2, 9^4, 10^1, ∞^8	0^1, 3^4, 4^1, 9^4, 10^3, ∞^2	0^1, 3^4, 4^1, 9^8, 10^4, 12^{16}, ∞^{21}
20	4^1, 6^1	4^1, 6^1, 10^5, 12^1, ∞^{10}	0^1, 4^2, $\frac{16}{3}^3$, 6^2, 10^5, 12^2, 20^1, ∞^2	0^1, 4^2, $\frac{16}{3}^3$, 6^2, 10^{10}, 12^3, $\frac{40}{3}^{18}$, 20^1, ∞^{26}
22	2^1, 6^1	2^1, 6^1, 11^6, 14^1, ∞^{12}	0^1, 2^2, 6^2, $\frac{20}{3}^3$, 8^2, 11^6, 14^1, 20^1, 24^1, ∞^2	0^1, 2^2, 6^2, $\frac{20}{3}^3$, 8^2, 11^{12}, 14^2, $\frac{44}{3}^{21}$, 20^1, 24^1, ∞^{31}
24	3^2	3^2, 12^7, 13^2, ∞^{13}	0^1, 3^4, 4^1, 8^1, 9^4, 12^7, 13^2, 22^2, ∞^2	0^1, 3^4, 4^1, 8^1, 9^4, 12^{14}, 13^4, 16^{25}, 22^2, ∞^{35}
26	4^3	4^3, 13^6, $\frac{29}{2}^4$, ∞^{15}	0^1, 4^6, $\frac{16}{3}^3$, 10^2, 12^1, 13^6, $\frac{29}{2}^4$, 20^1, 24^1, ∞^3	0^1, 4^6, $\frac{16}{3}^3$, 10^2, 12^1, 13^{12}, $\frac{29}{2}^8$, $\frac{52}{3}^{30}$, 20^1, 24^1, ∞^{40}
28	2^1, 5^2	2^1, 5^2, 14^7, 16^2, 17^2, ∞^{18}	0^1, 2^2, 5^4, $\frac{20}{3}^6$, 12^1, 14^7, 16^2, 17^2, 20^2, 30^2, ∞^3	0^1, 2^2, 5^4, $\frac{20}{3}^6$, 12^1, 14^{14}, 16^4, 17^4, $\frac{56}{3}^{33}$, 20^2, 30^2, ∞^{47}
30	4^1, 6^1, 10^1	4^1, 6^1, 10^1, 15^8, 16^3, 18^2, ∞^{20}	0^1, 4^3, 6^2, 8^7, 10^2, 15^8, 16^3, 18^2, 20^1, 24^1, $\frac{80}{3}^3$, ∞^3	0^1, 4^3, 6^2, 8^7, 10^2, 15^{16}, 16^6, 18^4, 20^{38}, 24^1, $\frac{80}{3}^3$, ∞^{53}
32	6^1, 10^1, 12^1	6^1, 10^1, 12^1, 16^9, $\frac{52}{3}^3$, $\frac{35}{2}^4$, ∞^{21}	0^1, 6^4, $\frac{28}{3}^6$, 10^2, 12^4, 16^9, $\frac{52}{3}^3$, $\frac{35}{2}^4$, 22^2, 30^2, ∞^3	0^1, 6^4, $\frac{28}{3}^6$, 10^2, 12^4, 16^{18}, $\frac{52}{3}^6$, $\frac{35}{2}^8$, $\frac{64}{3}^{42}$, 22^2, 30^2, ∞^{58}
34	2^1, 8^1, 11^2	2^1, 8^1, 11^2, 17^8, $\frac{56}{3}^3$, 19^6, 20^1, ∞^{23}	0^1, 2^2, 8^5, $\frac{32}{3}^3$, 11^4, 13^4, 14^2, 17^8, $\frac{56}{3}^3$, 19^6, 20^1, 24^1, 36^1, ∞^4	0^1, 2^2, 8^5, $\frac{32}{3}^3$, 11^4, 13^4, 14^2, 17^{16}, $\frac{56}{3}^6$, 19^{12}, 20^2, $\frac{68}{3}^{48}$, 24^1, 36^1, ∞^{64}

36	$3^2, 10^2, 12^1$	$3^2, 10^2, 12^1, 18^9, 19^2, 20^1, \frac{41}{2}^4, 21^2, \infty^{27}$	$0^1, 3^4, 4^1, 10^6, 12^3, 14^2, \frac{29}{2}^8, 18^9, 19^2, 20^1, \frac{41}{2}^4, 21^2, 36^2, \infty^5$	$0^1, 3^4, 4^1, 10^6, 12^3, 14^2, \frac{29}{2}^8, 18^{18}, 19^4, 20^2, \frac{41}{2}^8, 21^4, 24^{55}, 36^2, \infty^{72}$
38	$4^1, 6^1, 12^2, 18^1$	$4^1, 6^1, 12^2, 18^1, 19^{10}, \frac{61}{3}^6, 22^3, 30^1, \infty^{30}$	$0^1, 4^2, \frac{16}{3}^3, 6^2, 12^7, \frac{46}{3}^6, 16^4, 18^2, 19^{10}, \frac{61}{3}^6, 22^3, 30^1, 36^2, 56^1, \infty^5$	$0^1, 4^2, \frac{16}{3}^3, 6^2, 12^7, \frac{46}{3}^6, 16^4, 18^2, 19^{20}, \frac{61}{3}^{12}, 22^6, \frac{76}{3}^{60}, 30^2, 36^2, 56^1, \infty^{80}$
40	$2^1, 6^1, 14^2, 18^1$	$2^1, 6^1, 14^2, 18^1, 20^{11}, \frac{65}{3}^6, 22^4, 32^2, \infty^{32}$	$0^1, 2^2, 6^2, \frac{20}{3}^3, 8^2, 14^8, \frac{50}{3}^6, 18^2, 20^{14}, \frac{65}{3}^6, 22^4, 32^2, 36^1, 56^1, 60^1, \infty^5$	$0^1, 2^2, 6^2, \frac{20}{3}^3, 8^2, 14^8, \frac{50}{3}^6, 18^2, 20^{25}, \frac{65}{3}^{12}, 22^8, \frac{80}{3}^{66}, 32^4, 36^1, 56^1, 60^1, \infty^{87}$
42	$3^2, 10^1, 16^2, 18^1$	$3^2, 10^1, 16^2, 18^1, 21^{10}, 22^3, 23^2, \frac{93}{4}^8, 34^2, \infty^{35}$	$0^1, 3^4, 4^1, 8^1, 9^4, 10^2, 16^9, 18^4, 20^1, 21^{14}, 22^5, 23^2, \frac{93}{4}^8, 34^2, 58^2, \infty^6$	$0^1, 3^4, 4^1, 8^1, 9^4, 10^2, 16^9, 18^4, 20^1, 21^{24}, 22^8, 23^4, \frac{93}{4}^{16}, 28^{73}, 34^4, 58^2, \infty^{95}$
44	$4^3, 10^1, 18^3$	$4^3, 10^1, 18^3, 22^{11}, \frac{70}{3}^3, \frac{47}{2}^4, \frac{49}{2}^4, 25^2, 30^1, 36^1, \infty^{39}$	$0^1, 4^6, \frac{16}{3}^3, 10^4, 12^3, 18^{10}, \frac{64}{3}^3, 22^{17}, \frac{70}{3}^3, \frac{47}{2}^4, 24^1, \frac{49}{2}^4, 25^2, 30^1, 36^1, 56^1, 60^1, \infty^7$	$0^1, 4^6, \frac{16}{3}^3, 10^4, 12^3, 18^{10}, \frac{64}{3}^3, 22^{28}, \frac{70}{3}^6, \frac{47}{2}^8, 24^1, \frac{49}{2}^8, 25^4, \frac{88}{3}^{81}, 30^2, 36^2, 56^1, 60^1, \infty^{104}$
46	$2^1, 5^2, 12^1, 20^3$	$2^1, 5^2, 12^1, 20^3, 23^{12}, \frac{74}{3}^6, 25^2, 26^4, 31^2, 35^2, \infty^{43}$	$0^1, 2^2, 5^4, \frac{20}{3}^6, 12^3, 13^4, 20^{11}, \frac{68}{3}^3, 23^{16}, 24^1, \frac{74}{3}^6, 25^2, 26^4, 31^2, 35^2, 56^2, 66^2, \infty^7$	$0^1, 2^2, 5^4, \frac{20}{3}^6, 12^3, 13^4, 20^{11}, \frac{68}{3}^3, 23^{28}, 24^1, \frac{74}{3}^{12}, 25^4, 26^8, \frac{92}{3}^{87}, 31^4, 35^4, 56^2, 66^2, \infty^{114}$
48	$4^1, 6^3, 22^3$	$4^1, 6^3, 22^3, 24^{13}, 25^4, 26^7, 27^2, 32^1, 34^1, \frac{106}{3}^3, \infty^{46}$	$0^1, 4^3, 6^6, 8^7, 14^2, 16^2, \frac{52}{3}^3, 22^{12}, 24^{16}, 25^4, 26^7, 27^2, 28^2, 32^1, 34^1, \frac{106}{3}^3, 56^1, 60^1, \frac{188}{3}^3, \infty^7$	$0^1, 4^3, 6^6, 8^7, 14^2, 16^2, \frac{52}{3}^3, 22^{12}, 24^{29}, 25^8, 26^{14}, 27^4, 28^2, 32^{96}, 34^2, \frac{106}{3}^6, 56^1, 60^1, \frac{188}{3}^3, \infty^{123}$
50	$6^1, 7^4, 24^3$	$6^1, 7^4, 24^3, 25^{12}, \frac{79}{3}^6, \frac{53}{2}^4, \frac{82}{3}^6, 30^1, 34^2, 39^2, 42^1, \infty^{49}$	$0^1, 6^4, 7^8, \frac{28}{3}^9, 16^4, 24^{14}, 25^{12}, \frac{79}{3}^6, \frac{53}{2}^4, \frac{82}{3}^6, 28^2, 30^3, 34^2, 39^2, 42^1, 56^1, 58^2, 66^2, \infty^8$	$0^1, 6^4, 7^8, \frac{28}{3}^9, 16^4, 24^{14}, 25^{24}, \frac{79}{3}^{12}, \frac{53}{2}^8, \frac{82}{3}^{12}, 28^2, 30^4, \frac{100}{3}^{102}, 34^4, 39^4, 42^2, 56^1, 58^2, 66^2, \infty^{132}$

52	$2^1, 8^5, 26^3$	$2^1, 8^5, 26^{16}, \frac{83}{3}^6, 28^6, \frac{86}{3}^3, 29^2, 31^2, 32^1, 36^1, 38^1, 44^1, \infty^{53}$	$0^1, 2^2, 8^{13}, \frac{32}{3}^{12}, 18^2, 20^1, 26^{25}, \frac{83}{3}^6, 28^6, \frac{86}{3}^3, 29^6, 31^2, 32^1, 36^2, 38^1, 44^1, 56^2, 60^2, 72^1, \infty^9$	$0^1, 2^2, 8^{13}, \frac{32}{3}^{12}, 18^2, 20^1, 26^{38}, \frac{83}{3}^{12}, 28^{12}, \frac{86}{3}^6, 29^8, 31^4, 32^2, \frac{104}{3}^{111}, 36^3, 38^2, 44^2, 56^2, 60^2, 72^1, \infty^{142}$
54	$3^2, 9^4, 10^1, 28^2$	$3^2, 9^4, 10^1, 27^{14}, 28^7, 29^2, \frac{59}{2}^4, 30^5, 32^1, \frac{65}{2}^4, 39^2, 46^1, \infty^{58}$	$0^1, 3^4, 4^1, 9^8, 10^4, 12^{16}, 20^1, 24^1, 27^{14}, 28^{16}, 29^2, \frac{59}{2}^4, 30^7, 32^1, \frac{65}{2}^4, 36^2, 39^2, 46^1, 56^1, 58^4, 72^2, \infty^9$	$0^1, 3^4, 4^1, 9^8, 10^4, 12^{16}, 20^1, 24^1, 27^{28}, 28^{21}, 29^4, \frac{59}{2}^8, 30^{12}, 32^2, \frac{65}{2}^8, 36^{120}, 39^4, 46^2, 56^1, 58^4, 72^2, \infty^{154}$
56	$4^1, 6^1, 10^3, 12^1, 18^1, 30^2$	$4^1, 6^1, 10^3, 12^1, 18^1, 28^{15}, \frac{88}{3}^{12}, 30^3, 31^4, 33^2, \frac{100}{3}^3, 34^2, 40^1, 42^2, \infty^{61}$	$0^1, 4^2, \frac{16}{3}^3, 6^2, 10^6, 12^5, \frac{40}{3}^{15}, 16^1, 18^2, 20^1, 22^2, 28^{15}, \frac{88}{3}^{12}, 30^{11}, 31^4, 33^2, \frac{100}{3}^3, 34^2, 36^3, 40^1, 42^2, 56^1, \frac{172}{3}^3, 60^2, 72^2, \infty^9$	$0^1, 4^2, \frac{16}{3}^3, 6^2, 10^6, 12^5, \frac{40}{3}^{15}, 16^1, 18^2, 20^1, 22^2, 28^{30}, \frac{88}{3}^{24}, 30^{12}, 31^8, 33^4, \frac{100}{3}^6, 34^4, 36^3, \frac{112}{3}^{126}, 40^2, 42^4, 56^1, \frac{172}{3}^3, 60^2, 72^2, \infty^{164}$
58	$2^1, 6^1, 11^4, 14^1, 18^1, 32^2$	$2^1, 6^1, 11^4, 14^1, 18^1, 29^{14}, \frac{92}{3}^{12}, 31^8, 32^3, 34^2, \frac{104}{3}^3, 35^2, 38^1, 42^1, 43^2, \infty^{64}$	$0^1, 2^2, 6^2, \frac{20}{3}^3, 8^2, 11^8, 14^6, \frac{44}{3}^{12}, 16^2, 18^2, 20^3, 24^2, 29^{14}, \frac{92}{3}^{12}, 31^8, 32^{10}, 34^2, \frac{104}{3}^3, 35^2, 36^2, 38^1, 42^1, 43^2, 56^2, \frac{176}{3}^3, 60^1, 72^2, \infty^{10}$	$0^1, 2^2, 6^2, \frac{20}{3}^3, 8^2, 11^8, 14^6, \frac{44}{3}^{12}, 16^2, 18^2, 20^3, 24^2, 29^{28}, \frac{92}{3}^{24}, 31^{16}, 32^{11}, 34^4, \frac{104}{3}^6, 35^4, 36^2, 38^2, \frac{116}{3}^{135}, 42^2, 43^4, 56^2, \frac{176}{3}^3, 60^1, 72^2, \infty^{174}$
60	$3^2, 10^1, 12^3, 13^2, 18^1, 34^2$	$3^2, 10^1, 12^3, 13^2, 18^1, 30^{15}, 31^4, 32^4, \frac{129}{4}^{16}, 34^3, \frac{71}{2}^4, 36^1, 39^2, 44^1, 46^1, \infty^{68}$	$0^1, 3^4, 4^1, 8^1, 9^4, 10^2, 12^6, 13^4, 16^{19}, 18^2, 21^4, 22^2, 30^{15}, 31^4, 32^4, \frac{129}{4}^{16}, 34^9, \frac{71}{2}^4, 36^3, 39^2, 44^1, 46^1, 56^1, 58^4, 60^1, 72^2, \infty^{11}$	$0^1, 3^4, 4^1, 8^1, 9^4, 10^2, 12^6, 13^4, 16^{19}, 18^2, 21^4, 22^2, 30^{30}, 31^8, 32^8, \frac{129}{4}^{32}, 34^{10}, \frac{71}{2}^8, 36^4, 39^4, 40^{145}, 44^2, 46^2, 56^1, 58^4, 60^1, 72^2, \infty^{185}$
62	$4^3, 10^1, 13^2, \frac{29}{2}^4, 18^1, 36^1$	$4^3, 10^1, 13^2, \frac{29}{2}^4, 18^1, 31^{16}, \frac{97}{3}^6, \frac{65}{2}^4, \frac{67}{2}^8, 34^4, \frac{71}{2}^4, 36^2, 37^2, 40^3, 42^1, 46^1, \infty^{74}$	$0^1, 4^6, \frac{16}{3}^3, 10^4, 12^3, 13^4, \frac{29}{2}^8, \frac{52}{3}^{18}, 18^2, 22^6, 24^1, 31^{16}, \frac{97}{3}^6, \frac{65}{2}^4, \frac{67}{2}^8, 34^4, \frac{71}{2}^4, 36^9, 37^2, 40^3, 42^1, 46^1, 56^2, \frac{172}{3}^3, 60^2, 72^3, \infty^{12}$	$0^1, 4^6, \frac{16}{3}^3, 10^4, 12^3, 13^4, \frac{29}{2}^8, \frac{52}{3}^{18}, 18^2, 22^6, 24^1, 31^{32}, \frac{97}{3}^{12}, \frac{65}{2}^8, \frac{67}{2}^{16}, 34^8, \frac{71}{2}^8, 36^{10}, 37^4, 40^6, \frac{124}{3}^{156}, 42^2, 46^2, 56^2, \frac{172}{3}^3, 60^2, 72^3, \infty^{198}$

64	2^1, 5^2, 12^1, 14^1, 16^2, 17^2, 18^1, 20^1, 38^1	2^1, 5^2, 12^1, 14^1, 16^2, 17^2, 18^1, 20^1, 32^{17}, $\frac{101}{3}^{12}$, 34^2, 35^6, $\frac{147}{4}^8$, 38^2, 41^4, 43^2, 44^2, ∞^{78}	0^1, 2^2, 5^4, $\frac{20}{3}^6$, 12^3, 13^4, 14^2, 16^4, 17^8, 18^2, $\frac{56}{3}^{15}$, 20^2, 23^4, 28^1, 32^{17}, $\frac{101}{3}^{12}$, 34^2, 35^6, 36^2, $\frac{147}{4}^8$, 38^7, 41^4, 43^2, 44^2, 56^3, $\frac{176}{3}^3$, 60^1, 72^3, 84^2, ∞^{12}	0^1, 2^2, 5^4, $\frac{20}{3}^6$, 12^3, 13^4, 14^2, 16^4, 17^8, 18^2, $\frac{56}{3}^{15}$, 20^2, 23^4, 28^1, 32^{34}, $\frac{101}{3}^{24}$, 34^4, 35^{12}, 36^2, $\frac{147}{4}^{16}$, 38^8, 41^8, $\frac{128}{3}^{165}$, 43^4, 44^4, 56^3, $\frac{176}{3}^3$, 60^1, 72^3, 84^2, ∞^{210}
66	4^1, 6^3, 15^2, 16^1, 18^3, 22^2, 40^1	4^1, 6^3, 15^2, 16^1, 18^3, 22^2, 33^{16}, 34^5, 35^{14}, 36^2, 38^2, 39^2, 40^5, $\frac{122}{3}^3$, 42^7, $\frac{128}{3}^3$, ∞^{82}	0^1, 4^3, 6^6, 8^7, 14^2, 15^4, 16^4, $\frac{52}{3}^6$, 18^6, 20^{13}, 22^4, 24^6, 33^{16}, 34^5, 35^{14}, 36^2, 38^2, 39^2, 40^9, $\frac{122}{3}^3$, 42^7, $\frac{128}{3}^3$, $\frac{152}{3}^3$, 56^1, 58^2, 60^2, 64^3, 72^1, $\frac{224}{3}^3$, ∞^{13}	0^1, 4^3, 6^6, 8^7, 14^2, 15^4, 16^4, $\frac{52}{3}^6$, 18^6, 20^{13}, 22^4, 24^6, 33^{32}, 34^{10}, 35^{28}, 36^4, 38^4, 39^4, 40^{13}, $\frac{122}{3}^6$, 42^{14}, $\frac{128}{3}^6$, 44^{175}, $\frac{152}{3}^3$, 56^1, 58^2, 60^2, 64^3, 72^1, $\frac{224}{3}^3$, ∞^{222}
68	6^1, 7^4, 16^1, $\frac{52}{3}^3$, 18^1, 24^3, 42^1	6^1, 7^4, 16^1, $\frac{52}{3}^3$, 18^1, 24^3, 34^{17}, $\frac{106}{3}^3$, $\frac{71}{2}^8$, $\frac{109}{3}^{12}$, 37^4, 39^2, $\frac{79}{2}^8$, 42^2, 43^2, 46^2, 48^2, ∞^{87}	0^1, 6^4, 7^8, $\frac{28}{3}^9$, 16^6, $\frac{52}{3}^6$, 18^2, 21^8, $\frac{64}{3}^9$, 24^6, 25^8, 28^2, 34^{17}, $\frac{106}{3}^3$, $\frac{71}{2}^8$, 36^1, $\frac{109}{3}^{12}$, 37^4, 39^2, $\frac{79}{2}^8$, 42^5, 43^2, 46^2, 48^2, 56^2, 58^2, 60^1, 64^2, 66^2, 68^1, 72^1, 84^2, ∞^{14}	0^1, 6^4, 7^8, $\frac{28}{3}^9$, 16^6, $\frac{52}{3}^6$, 18^2, 21^8, $\frac{64}{3}^9$, 24^6, 25^8, 28^2, 34^{34}, $\frac{106}{3}^6$, $\frac{71}{2}^{16}$, 36^1, $\frac{109}{3}^{24}$, 37^8, 39^4, $\frac{79}{2}^{16}$, 42^6, 43^4, $\frac{136}{3}^{186}$, 46^4, 48^4, 56^2, 58^2, 60^1, 64^2, 66^2, 68^1, 72^1, 84^2, ∞^{235}
70	2^1, 8^5, 18^1, $\frac{56}{3}^3$, 20^2, 26^3	2^1, 8^5, 18^1, $\frac{56}{3}^3$, 20^2, 26^3, 35^{18}, $\frac{110}{3}^3$, 37^{12}, $\frac{113}{3}^6$, 38^1, $\frac{153}{4}^8$, $\frac{77}{2}^4$, 40^2, 41^4, 44^1, 47^2, 48^1, 56^1, ∞^{93}	0^1, 2^2, 8^{13}, $\frac{32}{3}^{12}$, 18^4, $\frac{56}{3}^6$, 20^7, 22^4, $\frac{68}{3}^9$, 26^{16}, 32^1, 35^{18}, $\frac{110}{3}^3$, 37^{12}, $\frac{113}{3}^6$, 38^1, $\frac{153}{4}^8$, $\frac{77}{2}^4$, 40^2, 41^4, 44^4, 47^2, 48^1, 56^5, 60^2, 62^2, 65^4, 72^1, 90^2, ∞^{15}	0^1, 2^2, 8^{13}, $\frac{32}{3}^{12}$, 18^4, $\frac{56}{3}^6$, 20^7, 22^4, $\frac{68}{3}^9$, 26^{16}, 32^1, 35^{36}, $\frac{110}{3}^6$, 37^{24}, $\frac{113}{3}^{12}$, 38^2, $\frac{153}{4}^{16}$, $\frac{77}{2}^8$, 40^4, 41^8, 44^5, $\frac{140}{3}^{198}$, 47^4, 48^2, 56^6, 60^2, 62^2, 65^4, 72^1, 90^2, ∞^{249}

72	3^2, 9^4, 10^1, 20^1, 21^4, 22^1, 28^2	3^2, 9^4, 10^1, 20^1, 21^4, 22^1, 28^2, 36^{19}, 37^6, 38^1, $\frac{77}{2}^8$, 39^4, $\frac{79}{2}^4$, $\frac{317}{8}^{16}$, 42^2, 46^1, 48^4, 56^1, 60^1, ∞^{98}	0^1, 3^4, 4^1, 9^8, 10^4, 12^{16}, 20^3, 21^{12}, 22^2, 24^{12}, 27^8, 28^6, 32^1, 36^{19}, 37^6, 38^1, $\frac{77}{2}^8$, 39^4, $\frac{79}{2}^4$, $\frac{317}{8}^{16}$, 42^2, 46^3, 48^4, 56^3, 58^4, 60^3, 64^3, 66^2, 76^1, 90^4, ∞^{15}	0^1, 3^4, 4^1, 9^8, 10^4, 12^{16}, 20^3, 21^{12}, 22^2, 24^{12}, 27^8, 28^6, 32^1, 36^{38}, 37^{12}, 38^2, $\frac{77}{2}^{16}$, 39^8, $\frac{79}{2}^8$, $\frac{317}{8}^{32}$, 42^4, 46^4, 48^{216}, 56^4, 58^4, 60^4, 64^3, 66^2, 76^1, 90^4, ∞^{263}
74	4^1, 6^1, 10^5, 12^1, 22^2, $\frac{70}{3}^3$, 24^1, 30^2	4^1, 6^1, 10^5, 12^1, 22^2, $\frac{70}{3}^3$, 24^1, 30^2, 37^{18}, $\frac{115}{3}^{12}$, 39^2, 40^9, $\frac{245}{6}^{12}$, 41^8, 42^3, 48^1, 49^2, 51^2, 58^2, ∞^{103}	0^1, 4^2, $\frac{16}{3}^3$, 6^2, 10^{10}, 12^3, $\frac{40}{3}^{18}$, 20^1, 22^8, $\frac{70}{3}^6$, 24^6, $\frac{76}{3}^9$, 28^6, 30^6, 36^1, 37^{18}, $\frac{115}{3}^{12}$, 39^2, 40^{10}, $\frac{245}{6}^{12}$, 41^8, 42^3, 48^2, 49^2, 51^2, 56^2, $\frac{172}{3}^3$, 58^4, 60^2, 66^4, 72^1, 80^1, 90^4, ∞^{16}	0^1, 4^2, $\frac{16}{3}^3$, 6^2, 10^{10}, 12^3, $\frac{40}{3}^{18}$, 20^1, 22^8, $\frac{70}{3}^6$, 24^6, $\frac{76}{3}^9$, 28^6, 30^6, 36^1, 37^{36}, $\frac{115}{3}^{24}$, 39^4, 40^{19}, $\frac{245}{6}^{24}$, 41^{16}, 42^6, 48^3, 49^4, $\frac{148}{3}^{219}$, 51^4, 56^2, $\frac{172}{3}^3$, 58^6, 60^2, 66^4, 72^1, 80^1, 90^4, ∞^{277}
76	2^1, 6^1, 11^6, 14^1, 24^1, $\frac{74}{3}^3$, 26^2, 32^2	2^1, 6^1, 11^6, 14^1, 24^1, $\frac{74}{3}^3$, 26^2, 32^2, 38^{19}, $\frac{119}{3}^{12}$, 40^8, 41^2, $\frac{83}{2}^8$, $\frac{253}{6}^{12}$, 43^6, 44^2, 47^2, 50^1, 51^2, 60^1, ∞^{108}	0^1, 2^2, 6^2, $\frac{20}{3}^3$, 8^2, 11^{12}, 14^2, $\frac{44}{3}^{21}$, 20^1, 24^6, $\frac{74}{3}^6$, 25^4, 26^4, $\frac{80}{3}^6$, 29^8, 32^6, 36^1, 38^{19}, $\frac{119}{3}^{12}$, 40^9, 41^2, $\frac{83}{2}^8$, $\frac{253}{6}^{12}$, 43^6, 44^3, 47^2, 50^1, 51^2, 56^4, $\frac{176}{3}^3$, 60^4, 68^3, 72^1, 84^1, 90^4, ∞^{17}	0^1, 2^2, 6^2, $\frac{20}{3}^3$, 8^2, 11^{12}, 14^2, $\frac{44}{3}^{21}$, 20^1, 24^6, $\frac{74}{3}^6$, 25^4, 26^4, $\frac{80}{3}^6$, 29^8, 32^6, 36^1, 38^{38}, $\frac{119}{3}^{24}$, 40^{17}, 41^4, $\frac{83}{2}^{16}$, $\frac{253}{6}^{24}$, 43^{12}, 44^5, 47^4, 50^2, $\frac{152}{3}^{231}$, 51^4, 56^4, $\frac{176}{3}^3$, 60^5, 68^3, 72^1, 84^1, 90^4, ∞^{291}
78	3^2, 12^7, 13^2, 26^1, 27^4, 34^2	3^2, 12^7, 13^2, 26^1, 27^4, 34^2, 39^{20}, 40^7, 41^4, $\frac{165}{4}^{16}$, 43^{10}, $\frac{87}{2}^4$, 44^3, $\frac{89}{2}^8$, 46^1, 48^4, 64^1, ∞^{114}	0^1, 3^4, 4^1, 8^1, 9^4, 12^{14}, 13^4, 16^{25}, 22^2, 26^4, 27^8, 28^8, $\frac{88}{3}^3$, 30^2, 31^4, 32^1, 34^4, 36^1, 39^{20}, 40^7, 41^4, $\frac{165}{4}^{16}$, 43^{10}, $\frac{87}{2}^4$, 44^3, $\frac{89}{2}^8$, 46^3, 48^4, 56^2, 58^8, 60^1, 64^1, 70^4, 72^2, 90^4, ∞^{18}	0^1, 3^4, 4^1, 8^1, 9^4, 12^{14}, 13^4, 16^{25}, 22^2, 26^4, 27^8, 28^8, $\frac{88}{3}^3$, 30^2, 31^4, 32^1, 34^4, 36^1, 39^{40}, 40^{14}, 41^8, $\frac{165}{4}^{32}$, 43^{20}, $\frac{87}{2}^8$, 44^6, $\frac{89}{2}^{16}$, 46^4, 48^8, 52^{244}, 56^2, 58^8, 60^1, 64^2, 70^4, 72^2, 90^4, ∞^{306}

| 80 | 4^{3}, 13^{6}, $\frac{29}{2}^{4}$, 28^{2}, 30^{2}, 36^{1} | 4^{3}, 13^{6}, $\frac{29}{2}^{4}$, 28^{2}, 30^{2}, 36^{1}, 40^{21}, $\frac{124}{3}^{9}$, $\frac{83}{2}^{8}$, $\frac{85}{2}^{8}$, 43^{8}, $\frac{89}{2}^{8}$, 45^{2}, $\frac{136}{3}^{6}$, 46^{5}, 49^{6}, 64^{1}, ∞^{120} | 0^{1}, 4^{6}, $\frac{16}{3}^{3}$, 10^{2}, 12^{1}, 13^{12}, $\frac{29}{2}^{8}$, $\frac{52}{3}^{30}$, 20^{1}, 24^{1}, 28^{8}, $\frac{88}{3}^{3}$, 30^{4}, 31^{4}, $\frac{65}{2}^{8}$, 36^{3}, 40^{21}, $\frac{124}{3}^{9}$, $\frac{83}{2}^{8}$, $\frac{85}{2}^{8}$, 43^{8}, $\frac{89}{2}^{8}$, 45^{2}, $\frac{136}{3}^{6}$, 46^{5}, 48^{1}, 49^{6}, 56^{2}, $\frac{172}{3}^{6}$, 60^{4}, 64^{1}, 72^{6}, 90^{6}, ∞^{18} | 0^{1}, 4^{6}, $\frac{16}{3}^{3}$, 10^{2}, 12^{1}, 13^{12}, $\frac{29}{2}^{8}$, $\frac{52}{3}^{30}$, 20^{1}, 24^{1}, 28^{8}, $\frac{88}{3}^{3}$, 30^{4}, 31^{4}, $\frac{65}{2}^{8}$, 36^{3}, 40^{42}, $\frac{124}{3}^{18}$, $\frac{83}{2}^{16}$, $\frac{85}{2}^{16}$, 43^{16}, $\frac{89}{2}^{16}$, 45^{4}, $\frac{136}{3}^{12}$, 46^{10}, 48^{1}, 49^{12}, $\frac{160}{3}^{255}$, 56^{2}, $\frac{172}{3}^{6}$, 60^{4}, 64^{2}, 72^{6}, 90^{6}, ∞^{322} |

2.2 $i = 2$.

Table 5: Slopes for $q = 3$, $i = 2$, type 0. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
1				
3				0^1
5				$\frac{2}{3}^3$
7		0^1	0^1	$0^2, \frac{4}{3}^3, \infty^1$
9		$0^1, 2^1$	$0^1, 2^1$	$0^2, 2^6, \infty^2$
11		$0^1, 1^2$	$1^2, \infty^1$	$0^1, 1^4, \frac{8}{3}^6, \infty^4$
13		$0^3, 2^1$	$0^1, 2^1, \infty^2$	$0^4, 2^2, \frac{10}{3}^9, \infty^6$
15		$0^2, 1^2, 4^1, 8^1$	$0^1, 1^2, 8^1, \infty^2$	$0^3, 1^4, 4^{11}, 8^2, \infty^8$
17		$0^2, \frac{2}{3}^3, 2^2, 8^1$	$\frac{2}{3}^3, 2^1, 8^1, \infty^3$	$0^2, \frac{2}{3}^6, 2^3, \frac{14}{3}^{12}, 8^2, \infty^{11}$
19		$0^5, \frac{4}{3}^3, 8^2$	$0^1, \frac{4}{3}^3, 8^1, \infty^5$	$0^6, \frac{4}{3}^6, \frac{16}{3}^{15}, 8^3, \infty^{15}$
21		$0^3, 1^2, 2^3, \frac{10}{3}^3, 8^1$	$0^1, 1^2, 2^1, 8^1, \infty^7$	$0^4, 1^4, 2^4, \frac{10}{3}^3, 6^{19}, 8^2, \infty^{19}$
23	0^1	$0^3, \frac{2}{3}^3, 1^4, 2^1, 8^2, 12^1, \infty^1$	$0^1, \frac{2}{3}^3, 2^1, 8^2, \infty^8$	$0^3, \frac{2}{3}^6, 1^4, 2^2, \frac{20}{3}^{24}, 8^4, 12^1, \infty^{22}$
25	0^1	$0^7, \frac{4}{3}^3, 2^3, 3^2, 8^2, \infty^1$	$0^2, \frac{4}{3}^3, 3^2, 8^2, \infty^9$	$0^8, \frac{4}{3}^6, 2^3, 3^4, \frac{22}{3}^{27}, 8^4, \infty^{26}$
27	2^1	$0^4, 1^4, 2^9, 4^1, 8^2, \infty^1$	$0^1, 2^6, 4^1, 8^2, \infty^{11}$	$0^5, 1^4, 2^{14}, 4^2, 8^{35}, \infty^{31}$
29	0^1	$0^4, \frac{2}{3}^3, 1^6, 2^2, \frac{8}{3}^3, 4^2, 5^2, 8^1, \infty^1$	$0^1, 1^2, \frac{8}{3}^3, 4^2, 5^2, 8^1, \infty^{13}$	$0^4, \frac{2}{3}^3, 1^8, 2^2, \frac{8}{3}^6, 4^4, 5^4, 8^2, \frac{26}{3}^{36}, \infty^{36}$
31	0^2	$0^9, \frac{4}{3}^3, 2^5, \frac{10}{3}^3, \frac{9}{2}^4, 6^1, 8^1, \infty^2$	$0^3, 2^1, \frac{10}{3}^3, \frac{9}{2}^4, 6^1, 8^1, \infty^{15}$	$0^{10}, \frac{4}{3}^3, 2^6, \frac{10}{3}^6, \frac{9}{2}^8, 6^2, 8^2, \frac{28}{3}^{42}, \infty^{41}$
33	$0^1, 4^1$	$0^5, 1^{10}, 2^1, 4^8, 5^2, 8^1, 10^1, 22^1, 26^1, \infty^2$	$0^2, 1^2, 4^7, 5^2, 8^1, 10^1, 26^1, \infty^{16}$	$0^6, 1^{12}, 2^1, 4^{14}, 5^4, 8^2, 10^{48}, 22^1, 26^2, \infty^{46}$
35	$0^1, 2^1$	$0^5, \frac{2}{3}^9, 2^7, 4^2, \frac{14}{3}^3, \frac{11}{2}^4, 11^2, 20^1, 26^1, \infty^2$	$0^1, \frac{2}{3}^3, 2^2, 4^2, \frac{14}{3}^3, \frac{11}{2}^4, 11^2, 26^1, \infty^{18}$	$0^5, \frac{2}{3}^{12}, 2^8, 4^4, \frac{14}{3}^6, \frac{11}{2}^8, \frac{32}{3}^{51}, 11^4, 20^1, 26^2, \infty^{52}$
37	0^2	$0^{11}, \frac{4}{3}^9, 2^1, 5^2, \frac{16}{3}^3, 6^2, 8^3, 9^2, 12^1, 14^1, 22^1, 26^2, \infty^2$	$0^3, \frac{4}{3}^3, 5^2, \frac{16}{3}^3, 6^2, 8^1, 9^2, 12^1, 14^1, 26^1, \infty^{21}$	$0^{12}, \frac{4}{3}^{12}, 2^1, 5^4, \frac{16}{3}^6, 6^4, 8^4, 9^4, \frac{34}{3}^{57}, 12^2, 14^2, 22^1, 26^3, \infty^{59}$

39	$0^1, 2^1, 8^1$	$0^6, 1^6, 2^7, 4^3, 6^1, \frac{13}{2}^4, 7^2, 8^5, \frac{28}{3}^3, 10^2, 14^1, 16^1, 26^1, \infty^3$	$0^2, 1^2, 2^2, 4^2, 6^1, \frac{13}{2}^4, 7^2, 8^2, 10^2, 14^1, 26^1, \infty^{24}$	$0^7, 1^8, 2^8, 4^5, 6^2, \frac{13}{2}^8, 7^4, 8^6, \frac{28}{3}^3, 10^4, 12^{64}, 14^2, 16^1, 26^2, \infty^{66}$
41	$0^1, 1^2$	$0^6, \frac{2}{3}^6, 1^8, 2^3, 4^2, 5^2, 6^1, 7^2, \frac{23}{3}^6, 8^3, 11^2, 14^1, 18^2, 26^2, 30^1, \infty^3$	$0^1, \frac{2}{3}^3, 1^2, 2^1, 4^2, 5^2, 7^2, \frac{23}{3}^6, 8^1, 11^2, 18^1, 26^2, \infty^{25}$	$0^6, \frac{2}{3}^9, 1^8, 2^4, 4^4, 5^4, 6^1, 7^4, \frac{23}{3}^{12}, 8^4, 11^4, \frac{38}{3}^{69}, 14^1, 18^3, 26^4, 30^1, \infty^{72}$
43	$0^2, 2^1$	$0^{13}, \frac{4}{3}^6, 2^6, 3^6, \frac{9}{2}^4, 8^1, \frac{25}{3}^6, 9^4, 14^2, 18^1, 26^2, 32^1, \infty^3$	$0^3, \frac{4}{3}^3, 2^1, 3^2, \frac{9}{2}^4, 8^1, \frac{25}{3}^6, 9^4, 18^1, 26^2, \infty^{28}$	$0^{14}, \frac{4}{3}^9, 2^6, 3^8, \frac{9}{2}^8, 8^2, \frac{25}{3}^{12}, 9^8, \frac{40}{3}^{75}, 14^2, 18^2, 26^4, 32^1, \infty^{80}$
45	$0^1, 2^2$	$0^7, 1^8, 2^{17}, 4^5, 5^2, 9^2, \frac{19}{2}^8, 10^2, 14^1, 20^1, 26^2, 32^2, \infty^3$	$0^2, 2^7, 4^3, 5^2, 9^2, \frac{19}{2}^8, 10^1, 20^1, 26^2, \infty^{32}$	$0^8, 1^8, 2^{22}, 4^8, 5^4, 9^4, \frac{19}{2}^{16}, 10^3, 14^{83}, 20^2, 26^4, 32^2, \infty^{89}$
47	$0^2, 1^2$	$0^7, \frac{2}{3}^6, 1^{10}, 2^4, \frac{8}{3}^9, 5^8, 8^2, 10^4, \frac{32}{3}^3, 11^4, 12^1, 26^2, 32^1, 36^1, \infty^4$	$0^2, 1^4, \frac{8}{3}^6, 5^4, 8^1, 10^4, \frac{32}{3}^3, 11^4, 26^2, \infty^{36}$	$0^7, \frac{2}{3}^6, 1^{12}, 2^4, \frac{8}{3}^{15}, 5^{12}, 8^3, 10^8, \frac{32}{3}^6, 11^8, 12^1, \frac{44}{3}^{90}, 26^4, 32^1, 36^1, \infty^{98}$
49	$0^3, 2^2$	$0^{15}, \frac{4}{3}^6, 2^9, \frac{10}{3}^{12}, 6^5, 8^3, 11^2, \frac{34}{3}^3, \frac{23}{2}^4, 12^2, 14^1, 26^4, 34^1, \infty^5$	$0^4, 2^3, \frac{10}{3}^9, 6^3, 8^1, 11^2, \frac{34}{3}^3, \frac{23}{2}^4, 12^2, 26^3, \infty^{38}$	$0^{16}, \frac{4}{3}^6, 2^{10}, \frac{10}{3}^{21}, 6^8, 8^4, 11^4, \frac{34}{3}^6, \frac{23}{2}^8, 12^4, 14^1, \frac{46}{3}^{99}, 26^7, 34^1, \infty^{105}$
51	$0^1, 1^2, 4^1, 8^1$	$0^8, 1^{18}, 2^2, 4^{17}, 7^4, 8^7, 12^3, \frac{25}{2}^4, 13^2, 16^2, 26^5, 28^1, \infty^5$	$0^2, 1^4, 4^{11}, 7^4, 8^3, 12^3, \frac{25}{2}^4, 13^2, 26^3, 28^1, \infty^{41}$	$0^9, 1^{20}, 2^2, 4^{27}, 7^8, 8^9, 12^6, \frac{25}{2}^8, 13^4, 16^{108}, 26^8, 28^2, \infty^{114}$
53	$0^2, 2^2, 8^1$	$0^8, \frac{2}{3}^{15}, 2^{12}, 4^2, \frac{14}{3}^{12}, 6^1, 8^{12}, 13^4, 14^3, 18^2, 26^6, 29^2, \infty^5$	$0^2, \frac{2}{3}^3, 2^3, 4^2, \frac{14}{3}^9, 6^1, 8^7, 13^4, 14^3, 26^3, 29^2, \infty^{45}$	$0^8, \frac{2}{3}^{18}, 2^{13}, 4^4, \frac{14}{3}^{21}, 6^2, 8^{18}, 13^8, 14^6, \frac{50}{3}^{114}, 18^2, 26^9, 29^4, \infty^{124}$
55	$0^4, 8^1, 10^1$	$0^{17}, \frac{4}{3}^{15}, 2^2, 5^6, \frac{16}{3}^{15}, 6^1, 8^7, 9^4, 10^2, 14^1, \frac{29}{2}^4, 20^3, 26^5, 30^1, 32^2, \infty^6$	$0^5, \frac{4}{3}^3, 5^2, \frac{16}{3}^{12}, 6^1, 8^3, 9^4, 10^1, 14^1, \frac{29}{2}^4, 20^1, 26^3, 30^1, 32^1, \infty^{49}$	$0^{18}, \frac{4}{3}^{18}, 2^2, 5^8, \frac{16}{3}^{27}, 6^2, 8^9, 9^8, 10^2, 14^2, \frac{29}{2}^8, \frac{52}{3}^{123}, 20^4, 26^8, 30^2, 32^3, \infty^{134}$
57	$0^2, 2^2, \frac{10}{3}^3$	$0^9, 1^{10}, 2^{11}, \frac{10}{3}^{12}, 4^4, 6^{17}, 8^5, 10^4, \frac{34}{3}^3, 15^2, 16^2, \frac{50}{3}^3, 22^1, 26^5, 28^1, 30^1, 32^1, \infty^7$	$0^3, 1^2, 2^3, \frac{10}{3}^3, 4^2, 6^{16}, 8^1, 10^3, 15^2, 16^2, \frac{50}{3}^3, 26^4, 28^1, 32^1, \infty^{52}$	$0^{10}, 1^{12}, 2^{12}, \frac{10}{3}^{12}, 4^6, 6^{33}, 8^6, 10^7, \frac{34}{3}^3, 15^4, 16^4, \frac{50}{3}^6, 18^{133}, 22^1, 26^9, 28^2, 30^1, 32^2, \infty^{143}$
59	$0^2, 1^4, 8^1$	$0^9, \frac{2}{3}^9, 1^{12}, 2^5, 4^2, 5^6, 6^2, \frac{20}{3}^{18}, 7^4, 8^8, \frac{32}{3}^3, 11^2, 16^4, 18^1, 20^2, 24^2, 26^4, 28^1, \frac{86}{3}^3, 36^1, \infty^7$	$0^2, \frac{2}{3}^3, 1^4, 2^1, 4^2, 5^2, \frac{20}{3}^{18}, 8^2, 11^2, 16^4, 18^1, 20^1, 26^4, \frac{86}{3}^3, 36^1, \infty^{55}$	$0^9, \frac{2}{3}^{12}, 1^{12}, 2^6, 4^4, 5^8, 6^2, \frac{20}{3}^{36}, 7^4, 8^9, \frac{32}{3}^3, 11^4, 16^8, 18^2, \frac{56}{3}^{141}, 20^3, 24^2, 26^8, 28^1, \frac{86}{3}^6, 36^2, \infty^{153}$

61	0^4, 2^3	0^{19}, $\frac{4}{3}^9$, 2^9, 3^{10}, $\frac{9}{2}^4$, $\frac{22}{3}^{18}$, $\frac{15}{2}^8$, 8^3, 10^1, $\frac{34}{3}^3$, 12^3, 14^1, 17^2, 18^2, 20^2, 26^6, $\frac{88}{3}^3$, 32^1, 36^1, ∞^7	0^5, $\frac{4}{3}^3$, 2^3, 3^2, $\frac{9}{2}^4$, $\frac{22}{3}^{18}$, 8^1, 10^1, 12^3, 17^2, 18^2, 26^4, $\frac{88}{3}^3$, 32^1, 36^1, ∞^{59}	0^{20}, $\frac{4}{3}^{12}$, 2^9, 3^{12}, $\frac{9}{2}^8$, $\frac{22}{3}^{36}$, $\frac{15}{2}^8$, 8^4, 10^2, $\frac{34}{3}^3$, 12^6, 14^1, 17^4, 18^4, $\frac{58}{3}^{150}$, 20^2, 26^{10}, $\frac{88}{3}^6$, 32^2, 36^2, ∞^{164}
63	0^2, 1^4, 2^2	0^{10}, 1^{12}, 2^{25}, 4^7, 5^6, 8^{27}, 11^2, 12^4, 13^2, 14^2, 18^1, 20^2, 24^1, 26^4, 28^3, 30^1, 32^2, 38^1, ∞^8	0^3, 1^4, 2^7, 4^3, 5^2, 8^{21}, 11^2, 13^2, 18^1, 20^2, 26^4, 28^1, 30^1, 32^2, 38^1, ∞^{64}	0^{11}, 1^{12}, 2^{30}, 4^{10}, 5^8, 8^{48}, 11^4, 12^4, 13^4, 14^2, 18^2, 20^{164}, 24^1, 26^8, 28^4, 30^2, 32^4, 38^2, ∞^{176}
65	0^2, $\frac{2}{3}^3$, 1^2, 2^2	0^{10}, $\frac{2}{3}^9$, 1^{14}, 2^6, $\frac{8}{3}^{12}$, 4^4, 5^{12}, 7^4, 8^5, $\frac{17}{2}^8$, $\frac{26}{3}^{12}$, 11^2, 12^1, 14^3, 18^2, 19^2, 22^1, 26^5, $\frac{86}{3}^3$, 30^1, 32^1, 36^1, 42^1, ∞^9	0^2, $\frac{2}{3}^3$, 1^4, 2^2, $\frac{8}{3}^6$, 5^4, 8^1, $\frac{17}{2}^8$, $\frac{26}{3}^{12}$, 11^2, 12^1, 14^2, 18^1, 19^2, 26^5, $\frac{86}{3}^3$, 32^1, 36^1, ∞^{68}	0^{10}, $\frac{2}{3}^9$, 1^{16}, 2^6, $\frac{8}{3}^{18}$, 4^4, 5^{16}, 7^4, 8^6, $\frac{17}{2}^{16}$, $\frac{26}{3}^{24}$, 11^4, 12^2, 14^5, 18^3, 19^4, $\frac{62}{3}^{171}$, 22^1, 26^{10}, $\frac{86}{3}^6$, 30^1, 32^2, 36^2, 42^1, ∞^{187}
67	0^4, $\frac{4}{3}^3$, 2^2	0^{21}, $\frac{4}{3}^9$, 2^{13}, $\frac{10}{3}^{15}$, $\frac{9}{2}^8$, 6^7, 8^8, 9^6, $\frac{28}{3}^{15}$, $\frac{23}{2}^4$, 14^1, 18^3, 20^2, 24^1, 26^5, $\frac{88}{3}^3$, 30^2, 32^1, 36^2, 40^1, ∞^9	0^5, $\frac{4}{3}^3$, 2^3, $\frac{10}{3}^9$, 6^3, 8^1, 9^6, $\frac{28}{3}^{15}$, $\frac{23}{2}^4$, 14^1, 18^1, 20^2, 26^5, $\frac{88}{3}^3$, 30^2, 36^2, ∞^{71}	0^{22}, $\frac{4}{3}^9$, 2^{14}, $\frac{10}{3}^{24}$, $\frac{9}{2}^8$, 6^{10}, 8^9, 9^{12}, $\frac{28}{3}^{30}$, $\frac{23}{2}^8$, 14^2, 18^4, 20^4, $\frac{64}{3}^{180}$, 24^1, 26^{10}, $\frac{88}{3}^6$, 30^4, 32^1, 36^4, 40^1, ∞^{198}
69	0^2, 1^4, 2^1, 4^1, 8^1	0^{11}, 1^{26}, 2^3, 4^{26}, 5^4, 7^4, 8^{12}, $\frac{19}{2}^4$, 10^{18}, 12^2, 13^2, 14^3, 18^2, 19^2, 22^1, 26^5, 28^1, 30^2, $\frac{61}{2}^4$, 36^1, 38^1, 40^1, ∞^9	0^3, 1^6, 2^1, 4^{11}, 7^4, 8^3, $\frac{19}{2}^4$, 10^{16}, 12^2, 13^2, 18^1, 19^2, 26^5, 28^1, 30^1, $\frac{61}{2}^4$, 36^1, 40^1, ∞^{76}	0^{12}, 1^{28}, 2^3, 4^{36}, 5^4, 7^8, 8^{14}, $\frac{19}{2}^8$, 10^{34}, 12^4, 13^4, 14^3, 18^3, 19^4, 22^{191}, 26^{10}, 28^2, 30^3, $\frac{61}{2}^8$, 36^2, 38^1, 40^2, ∞^{211}
71	0^3, $\frac{2}{3}^3$, 2^3, 8^1	0^{11}, $\frac{2}{3}^{21}$, 2^{17}, 4^4, $\frac{14}{3}^{18}$, $\frac{11}{2}^8$, 8^{13}, 10^6, $\frac{32}{3}^{12}$, 11^8, $\frac{25}{2}^4$, 13^2, 18^1, 20^2, 24^2, 26^5, 29^2, 31^2, 32^3, 36^1, 38^1, ∞^{10}	0^3, $\frac{2}{3}^6$, 2^4, $\frac{14}{3}^{12}$, 8^7, 10^6, $\frac{32}{3}^{12}$, $\frac{25}{2}^4$, 13^2, 18^1, 20^1, 26^5, 29^2, 31^2, 32^3, 38^1, ∞^{82}	0^{11}, $\frac{2}{3}^{24}$, 2^{18}, 4^4, $\frac{14}{3}^{30}$, $\frac{11}{2}^8$, 8^{19}, 10^{12}, $\frac{32}{3}^{24}$, 11^8, $\frac{25}{2}^8$, 13^4, 18^2, 20^3, $\frac{68}{3}^{201}$, 24^2, 26^{10}, 29^4, 31^4, 32^6, 36^1, 38^2, ∞^{225}

73	$0^5, \frac{4}{3}^3, 2^1, 8^2$	$0^{23}, \frac{4}{3}^{21}, 2^3, 5^{12}, \frac{16}{3}^{21}, 6^4, 8^{11}, 9^6, \frac{21}{2}^4, \frac{34}{3}^9, 12^8, 13^8, 14^1, 15^2, 20^1, 26^8, 30^1, 32^2, \frac{65}{2}^4, 38^1, 42^1, \infty^{11}$	$0^6, \frac{4}{3}^6, 2^1, \frac{16}{3}^{15}, 8^3, 9^6, \frac{21}{2}^4, \frac{34}{3}^9, 13^8, 15^2, 20^1, 26^6, 30^1, 32^2, \frac{65}{2}^4, 38^1, \infty^{87}$	$0^{24}, \frac{4}{3}^{24}, 2^3, 5^{12}, \frac{16}{3}^{36}, 6^4, 8^{12}, 9^{12}, \frac{21}{2}^8, \frac{34}{3}^{18}, 12^8, 13^{16}, 14^1, 15^4, 20^2, \frac{70}{3}^{213}, 26^{14}, 30^2, 32^4, \frac{65}{2}^8, 38^2, 42^1, \infty^{238}$
75	$0^2, 1^2, 2^3, \frac{10}{3}^3, 4^1, 8^1$	$0^{12}, 1^{14}, 2^{15}, \frac{10}{3}^{18}, 4^7, 6^{21}, \frac{13}{2}^8, 7^4, 8^8, 10^5, 11^2, 12^8, \frac{27}{2}^4, 14^6, \frac{43}{3}^6, \frac{52}{3}^3, 26^6, 28^2, 32^1, 33^2, 34^2, \frac{104}{3}^3, 40^1, 48^1, \infty^{12}$	$0^3, 1^4, 2^4, \frac{10}{3}^3, 4^1, 6^{19}, 8^2, 10^5, 11^2, 12^7, \frac{27}{2}^4, 14^4, \frac{43}{3}^6, 26^6, 28^2, 32^1, 33^2, 34^2, \frac{104}{3}^3, \infty^{91}$	$0^{13}, 1^{16}, 2^{16}, \frac{10}{3}^{18}, 4^7, 6^{40}, \frac{13}{2}^8, 7^4, 8^9, 10^{10}, 11^4, 12^{15}, \frac{27}{2}^8, 14^{10}, \frac{43}{3}^{12}, \frac{52}{3}^3, 24^{226}, 26^{12}, 28^4, 32^2, 33^4, 34^4, \frac{104}{3}^6, 40^1, 48^1, \infty^{250}$
77	$0^3, 1^4, 2^1, 6^1, 8^2, 12^1$	$0^{12}, \frac{2}{3}^{12}, 1^{16}, 2^7, 4^4, 5^{12}, 6^3, \frac{20}{3}^{24}, 7^4, \frac{23}{3}^{12}, 8^{12}, 10^1, 11^6, 12^2, \frac{38}{3}^6, 14^2, \frac{57}{4}^8, 17^2, 24^2, 26^6, \frac{86}{3}^3, 29^2, 34^4, 38^1, 42^2, 45^2, 54^1, \infty^{12}$	$0^3, \frac{2}{3}^3, 1^4, 2^2, 6^1, \frac{20}{3}^{24}, 8^4, 11^6, 12^1, \frac{38}{3}^6, 14^2, \frac{57}{4}^8, 17^2, 26^6, \frac{86}{3}^3, 29^2, 34^4, 38^1, 45^2, \infty^{96}$	$0^{12}, \frac{2}{3}^{15}, 1^{16}, 2^8, 4^4, 5^{12}, 6^3, \frac{20}{3}^{48}, 7^4, \frac{23}{3}^{12}, 8^{14}, 10^1, 11^{12}, 12^2, \frac{38}{3}^{12}, 14^4, \frac{57}{4}^{16}, 17^4, 24^2, \frac{74}{3}^{237}, 26^{12}, \frac{86}{3}^6, 29^4, 34^8, 38^2, 42^2, 45^4, 54^1, \infty^{264}$
79	$0^6, 2^3, 3^2, 8^2$	$0^{25}, \frac{4}{3}^{12}, 2^{12}, 3^{14}, \frac{9}{2}^8, \frac{22}{3}^{27}, 8^{17}, \frac{25}{3}^{12}, 9^4, 12^7, \frac{40}{3}^3, \frac{29}{2}^4, 15^6, 18^1, 20^1, 26^8, \frac{88}{3}^3, 30^3, 32^1, 35^2, 36^1, 44^4, 45^2, \infty^{13}$	$0^7, \frac{4}{3}^3, 2^3, 3^4, \frac{22}{3}^{27}, 8^4, 12^7, \frac{40}{3}^3, \frac{29}{2}^4, 15^6, 18^1, 26^6, \frac{88}{3}^3, 30^3, 32^1, 35^2, 36^1, 44^1, 45^2, \infty^{102}$	$0^{26}, \frac{4}{3}^{15}, 2^{12}, 3^{16}, \frac{9}{2}^8, \frac{22}{3}^{54}, 8^{19}, \frac{25}{3}^{12}, 9^4, 12^{14}, \frac{40}{3}^6, \frac{29}{2}^8, 15^{12}, 18^2, 20^1, \frac{76}{3}^{249}, 26^{14}, \frac{88}{3}^6, 30^6, 32^2, 35^4, 36^2, 44^5, 45^4, \infty^{279}$

Table 6: Slopes for $q = 3$, $i = 2$, type 1. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
0				$\color{blue}0^1$
2		0^1	0^1	$0^2, \infty^1$
4		0^2	$0^1, \infty^1$	$0^3, \infty^3$
6		0^3	$0^1, \infty^2$	$0^4, \color{blue}2^1, \color{black}\infty^5$
8		0^4	$0^1, \infty^3$	$0^5, \frac{8}{3}^3, \infty^7$
10	0^1	$0^5, \infty^1$	$0^2, \infty^4$	$0^6, \frac{10}{3}^6, \infty^9$
12	0^1	$0^6, 2^1, \infty^1$	$0^2, 2^1, \infty^5$	$0^7, 2^2, \color{blue}4^7, \color{black}\infty^{12}$
14	0^1	$0^7, 3^2, \infty^1$	$0^2, 3^2, \infty^6$	$0^8, 3^4, \frac{14}{3}^9, \infty^{15}$
16	0^1	$0^8, 4^3, \infty^1$	$0^2, 4^3, \infty^7$	$0^9, 4^6, \frac{16}{3}^{12}, \infty^{18}$
18	0^2	$0^9, 2^2, 5^2, \infty^2$	$0^3, 2^1, 5^2, \infty^9$	$0^{10}, 2^3, 5^4, \color{blue}6^{16}, \color{black}\infty^{22}$
20	0^2	$0^{10}, \frac{8}{3}^3, 4^1, 6^1, 10^1, \infty^2$	$0^3, \frac{8}{3}^3, 6^1, 10^1, \infty^{10}$	$0^{11}, \frac{8}{3}^6, 4^1, 6^2, \frac{20}{3}^{18}, 10^2, \infty^{26}$
22	0^2	$0^{11}, \frac{10}{3}^3, 4^2, 6^1, 10^1, 12^1, \infty^2$	$0^3, \frac{10}{3}^3, 4^2, 10^1, 12^1, \infty^{11}$	$0^{12}, \frac{10}{3}^6, 4^4, 6^1, \frac{22}{3}^{21}, 10^2, 12^2, \infty^{30}$
24	0^2	$0^{12}, 2^3, 4^1, \frac{9}{2}^4, 11^2, \infty^2$	$0^3, 2^1, 4^1, \frac{9}{2}^4, 11^2, \infty^{13}$	$0^{13}, 2^4, 4^2, \frac{9}{2}^8, \color{blue}8^{25}, \color{black}11^4, \infty^{35}$
26	0^3	$0^{13}, \frac{8}{3}^3, 3^4, 5^2, 6^1, 10^1, 12^1, \infty^3$	$0^4, \frac{8}{3}^3, 5^2, 6^1, 10^1, 12^1, \infty^{16}$	$0^{14}, \frac{8}{3}^6, 3^4, 5^4, 6^2, \frac{26}{3}^{30}, 10^2, 12^2, \infty^{41}$
28	0^3	$0^{14}, \frac{10}{3}^6, 4^2, 6^3, 10^2, 15^2, \infty^3$	$0^4, \frac{10}{3}^6, 6^1, 10^2, 15^2, \infty^{17}$	$0^{15}, \frac{10}{3}^{12}, 4^2, 6^4, \frac{28}{3}^{33}, 10^4, 15^4, \infty^{46}$
30	0^3	$0^{15}, 2^4, 4^7, 6^2, \color{blue}10^1, \color{black}12^1, \frac{40}{3}^3, \infty^3$	$0^4, 2^1, 4^7, \color{blue}10^1, \color{black}12^1, \frac{40}{3}^3, \infty^{19}$	$0^{16}, 2^5, 4^{14}, 6^2, \color{blue}10^{39}, \color{black}12^2, \frac{40}{3}^6, \infty^{52}$
32	0^3	$0^{16}, \frac{8}{3}^3, 3^6, \frac{14}{3}^6, 6^2, 11^2, 15^2, \infty^3$	$0^4, 3^2, \frac{14}{3}^6, 6^2, 11^2, 15^2, \infty^{22}$	$0^{17}, \frac{8}{3}^3, 3^8, \frac{14}{3}^{12}, 6^4, \frac{32}{3}^{42}, 11^4, 15^4, \infty^{59}$
34	0^4	$0^{17}, \frac{10}{3}^3, 4^9, \frac{16}{3}^3, 6^1, \frac{13}{2}^4, 7^2, 12^1, 18^1, \infty^4$	$0^5, 4^3, \frac{16}{3}^3, \frac{13}{2}^4, 7^2, 12^1, 18^1, \infty^{26}$	$0^{18}, \frac{10}{3}^3, 4^{12}, \frac{16}{3}^6, 6^1, \frac{13}{2}^8, 7^4, \frac{34}{3}^{48}, 12^2, 18^2, \infty^{67}$
36	$0^4, 2^1$	$0^{18}, 2^5, 4^1, 5^6, 6^3, 7^2, \frac{29}{4}^8, 18^2, \infty^5$	$0^5, 2^2, 5^2, 6^1, 7^2, \frac{29}{4}^8, 18^2, \infty^{28}$	$0^{19}, 2^6, 4^1, 5^8, 6^4, 7^4, \frac{29}{4}^{16}, \color{blue}12^{55}, \color{black}18^4, \infty^{73}$
38	$0^4, 4^1$	$0^{19}, \frac{8}{3}^9, 4^2, 6^6, \frac{23}{3}^6, 8^4, 18^2, 22^1, 28^1, \infty^5$	$0^5, \frac{8}{3}^3, 4^1, 6^3, \frac{23}{3}^6, 8^4, 18^2, 28^1, \infty^{30}$	$0^{20}, \frac{8}{3}^{12}, 4^2, 6^9, \frac{23}{3}^{12}, 8^8, \frac{38}{3}^{60}, 18^4, 22^1, 28^2, \infty^{80}$

40	$0^4, 6^1$	$0^{20}, \frac{10}{3}^9, 4^6, 6^2, 7^4,$ $\frac{25}{3}^6, 10^3, 18^1, 24^2,$ $28^1, 30^1, \infty^5$	$0^5, \frac{10}{3}^3, 4^2, 6^1, 7^4,$ $\frac{25}{3}^6, 10^3, 18^1, 28^1,$ $30^1, \infty^{33}$	$0^{21}, \frac{10}{3}^{12}, 4^8, 6^2, 7^8,$ $\frac{25}{3}^{12}, 10^6, \frac{40}{3}^{66}, 18^2, 24^2,$ $28^2, 30^2, \infty^{88}$
42	$0^5, 2^1$	$0^{21}, 2^6, 4^3, \frac{9}{2}^{12}, 8^5,$ $9^2, 10^1, \frac{21}{2}^4, 11^2, 26^2,$ $29^2, \infty^6$	$0^6, 2^2, 4^1, \frac{9}{2}^4, 8^5,$ $9^2, 10^1, \frac{21}{2}^4, 11^2, 29^2,$ ∞^{37}	$0^{22}, 2^7, 4^4, \frac{9}{2}^{16}, 8^{10}, 9^4,$ $10^2, \frac{21}{2}^8, 11^4, 14^{73}, 26^2,$ $29^4, \infty^{97}$
44	$0^5, 3^2$	$0^{22}, \frac{8}{3}^6, 3^8, 5^6, 6^5,$ $9^4, \frac{32}{3}^3, 11^6, 12^1, 16^1,$ $28^2, 30^1, \infty^7$	$0^6, \frac{8}{3}^3, 3^2, 5^2, 6^3,$ $9^4, \frac{32}{3}^3, 11^6, 12^1, 28^1,$ $30^1, \infty^{40}$	$0^{23}, \frac{8}{3}^9, 3^8, 5^8, 6^8, 9^8,$ $\frac{32}{3}^6, 11^{12}, 12^2, \frac{44}{3}^{81}, 16^1,$ $28^3, 30^2, \infty^{105}$
46	$0^5, 4^1, 6^1$	$0^{23}, \frac{10}{3}^{12}, 4^4, 6^7, \frac{13}{2}^4,$ $10^5, \frac{34}{3}^3, \frac{23}{2}^4, 12^1,$ $16^2, 24^2, 28^2, 33^2,$ ∞^7	$0^6, \frac{10}{3}^6, 4^1, 6^2, \frac{13}{2}^4,$ $10^5, \frac{34}{3}^3, \frac{23}{2}^4, 12^1,$ $28^2, 33^2, \infty^{42}$	$0^{24}, \frac{10}{3}^{18}, 4^4, 6^8, \frac{13}{2}^8,$ $10^{10}, \frac{34}{3}^6, \frac{23}{2}^8, 12^2, \frac{46}{3}^{87},$ $16^2, 24^2, 28^4, 33^4, \infty^{113}$
48	$0^5, 2^1, 6^1$	$0^{24}, 2^7, 4^{14}, 6^4, 7^2,$ $8^2, \frac{26}{3}^3, 11^6, 12^3, 14^2,$ $16^1, 20^1, \frac{68}{3}^3, 28^1,$ $30^1, \frac{94}{3}^3, \infty^7$	$0^6, 2^2, 4^7, 6^1, 7^2,$ $8^2, \frac{26}{3}^3, 11^6, 12^3, 14^2,$ $28^1, 30^1, \frac{94}{3}^3, \infty^{45}$	$0^{25}, 2^8, 4^{21}, 6^4, 7^4, 8^4,$ $\frac{26}{3}^6, 11^{12}, 12^6, 14^4, 16^{95},$ $20^1, \frac{68}{3}^3, 28^2, 30^2, \frac{94}{3}^6,$ ∞^{122}
50	$0^6, 3^2$	$0^{25}, \frac{8}{3}^6, 3^{10}, \frac{14}{3}^{15}, 8^4,$ $10^1, 12^8, 14^2, 15^2,$ $18^2, 28^3, 29^2, 33^2,$ $34^1, \infty^8$	$0^7, 3^4, \frac{14}{3}^9, 8^4, 12^8,$ $14^2, 15^2, 28^1, 29^2,$ $33^2, \infty^{50}$	$0^{26}, \frac{8}{3}^6, 3^{12}, \frac{14}{3}^{24}, 8^8,$ $10^1, 12^{16}, 14^4, 15^4,$ $\frac{50}{3}^{102}, 18^2, 28^4, 29^4, 33^4,$ $34^1, \infty^{133}$
52	$0^6, 4^3$	$0^{26}, \frac{10}{3}^6, 4^{15}, \frac{16}{3}^{15},$ $6^2, 9^2, 10^3, 12^1, 13^6,$ $\frac{29}{2}^4, 18^1, 20^1, 24^1,$ $28^2, 30^2, 36^2, \infty^9$	$0^7, 4^6, \frac{16}{3}^{12}, 9^2, 10^1,$ $13^6, \frac{29}{2}^4, 18^1, 28^2,$ $30^2, 36^1, \infty^{54}$	$0^{27}, \frac{10}{3}^6, 4^{18}, \frac{16}{3}^{27}, 6^2,$ $9^4, 10^4, 12^1, 13^{12}, \frac{29}{2}^8,$ $\frac{52}{3}^{111}, 18^2, 20^1, 24^1, 28^4,$ $30^4, 36^3, \infty^{143}$
54	$0^6, 2^1, 5^2$	$0^{27}, 2^8, 4^2, 5^{10}, 6^{21},$ $10^2, 11^4, 12^1, 14^7,$ $15^2, 18^2, 24^2, 28^1,$ $29^4, 36^2, 38^1, \infty^9$	$0^7, 2^2, 5^4, 6^{16}, 10^1,$ $12^1, 14^7, 15^2, 18^2,$ $28^1, 29^4, 36^2, \infty^{56}$	$0^{28}, 2^9, 4^2, 5^{12}, 6^{37},$ $10^3, 11^4, 12^2, 14^{14}, 15^4,$ $18^{122}, 24^2, 28^2, 29^8, 36^4,$ $38^1, \infty^{152}$
56	$0^6, 4^1, 6^1, 10^1$	$0^{28}, \frac{8}{3}^{15}, 4^3, 6^9, \frac{20}{3}^{15},$ $8^1, 10^5, \frac{32}{3}^3, 11^2, 12^2,$ $15^6, 18^3, 24^1, 28^3,$ $\frac{86}{3}^3, 30^2, 36^2, \infty^9$	$0^7, \frac{8}{3}^3, 4^1, 6^4, \frac{20}{3}^{15},$ $8^1, 10^2, 11^2, 15^6, 18^3,$ $28^1, \frac{86}{3}^3, 30^2, 36^2,$ ∞^{60}	$0^{29}, \frac{8}{3}^{18}, 4^3, 6^{12}, \frac{20}{3}^{30},$ $8^2, 10^6, \frac{32}{3}^3, 11^4, 12^2,$ $15^{12}, 18^6, \frac{56}{3}^{126}, 24^1,$ $28^4, \frac{86}{3}^6, 30^4, 36^4, \infty^{163}$
58	$0^7, 6^1, 10^1, 12^1$	$0^{29}, \frac{10}{3}^{15}, 4^{10}, 6^3, 7^4,$ $\frac{22}{3}^{12}, 8^2, 10^7, \frac{34}{3}^3,$ $12^6, 16^5, 18^3, 26^1,$ $28^4, \frac{88}{3}^3, 30^1, 36^2,$ ∞^{10}	$0^8, \frac{10}{3}^3, 4^2, 6^1, 7^4,$ $\frac{22}{3}^{12}, 8^2, 10^4, 12^3,$ $16^5, 18^2, 28^2, \frac{88}{3}^3,$ $30^1, 36^2, \infty^{66}$	$0^{30}, \frac{10}{3}^{18}, 4^{12}, 6^3, 7^8,$ $\frac{22}{3}^{24}, 8^4, 10^{10}, \frac{34}{3}^3, 12^8,$ $16^{10}, 18^5, \frac{58}{3}^{135}, 26^1,$ $28^6, \frac{88}{3}^6, 30^2, 36^4, \infty^{176}$

60	$0^7, 2^2, 11^2$	$0^{30}, 2^9, 4^5, \frac{9}{2}^{20}, 8^{20}, \frac{21}{2}^4, 11^{10}, 12^1, 17^4, 18^4, 28^2, 29^4, 30^1, 32^1, 36^2, \infty^{11}$	$0^8, 2^3, 4^1, \frac{9}{2}^4, 8^{19}, \frac{21}{2}^4, 11^4, 17^4, 18^2, 28^1, 29^4, 30^1, 36^2, \infty^{71}$	$0^{31}, 2^{10}, 4^6, \frac{9}{2}^{24}, 8^{39}, \frac{21}{2}^8, 11^{12}, 12^1, 17^8, 18^6, 20^{145}, 28^3, 29^8, 30^2, 32^1, 36^4, \infty^{188}$
62	$0^7, 3^4, 12^1$	$0^{31}, \frac{8}{3}^9, 3^{12}, 5^{10}, 6^7, \frac{26}{3}^{18}, 9^4, 10^1, 11^6, 12^5, 18^9, 22^1, 28^2, \frac{86}{3}^3, 30^3, 36^3, \infty^{12}$	$0^8, \frac{8}{3}^3, 3^4, 5^2, 6^3, \frac{26}{3}^{18}, 11^6, 12^2, 18^6, 28^2, \frac{86}{3}^3, 30^2, 36^3, \infty^{74}$	$0^{32}, \frac{8}{3}^{12}, 3^{12}, 5^{12}, 6^{10}, \frac{26}{3}^{36}, 9^4, 10^1, 11^{12}, 12^6, 18^{15}, \frac{62}{3}^{156}, 22^1, 28^4, \frac{86}{3}^6, 30^5, 36^6, \infty^{198}$
64	$0^7, 4^2, 6^2, 18^1$	$0^{32}, \frac{10}{3}^{18}, 4^6, 6^{11}, \frac{13}{2}^4, \frac{17}{2}^4, \frac{28}{3}^{15}, \frac{19}{2}^8, \frac{23}{2}^4, 12^1, 14^1, 18^8, 19^4, 22^2, 24^2, 28^3, \frac{88}{3}^3, 30^1, 36^3, 42^2, \infty^{12}$	$0^8, \frac{10}{3}^6, 4^2, 6^3, \frac{13}{2}^4, \frac{17}{2}^4, \frac{28}{3}^{15}, \frac{23}{2}^4, 14^1, 18^3, 19^4, 28^3, \frac{88}{3}^3, 30^1, 36^3, 42^2, \infty^{78}$	$0^{33}, \frac{10}{3}^{24}, 4^6, 6^{12}, \frac{13}{2}^8, \frac{17}{2}^8, \frac{28}{3}^{30}, \frac{19}{2}^8, \frac{23}{2}^8, 12^1, 14^2, 18^{10}, 19^8, \frac{64}{3}^{165}, 22^2, 24^2, 28^6, \frac{88}{3}^6, 30^2, 36^6, 42^4, \infty^{210}$
66	$0^8, 2^2, 6^2, 18^1$	$0^{33}, 2^{10}, 4^{21}, 6^6, 7^2, 8^2, \frac{26}{3}^6, 10^{15}, 12^8, 14^4, \frac{46}{3}^3, 18^9, \frac{58}{3}^3, 20^3, \frac{76}{3}^3, 28^1, 29^2, 30^2, 32^3, 36^1, \frac{112}{3}^3, \infty^{13}$	$0^9, 2^3, 4^7, 6^2, 7^2, 8^2, \frac{26}{3}^6, 10^{13}, 12^6, 18^1, 20^3, \frac{76}{3}^3, 28^1, 29^2, 30^2, 32^3, 36^1, \frac{112}{3}^3, \infty^{84}$	$0^{34}, 2^{11}, 4^{28}, 6^6, 7^4, 8^4, \frac{26}{3}^{12}, 10^{28}, 12^{14}, 14^4, \frac{46}{3}^3, 18^9, \frac{58}{3}^3, 20^6, 22^{175}, \frac{76}{3}^6, 28^2, 29^4, 30^4, 32^6, 36^2, \frac{112}{3}^6, \infty^{224}$
68	$0^8, \frac{8}{3}^3, 3^2, 18^1$	$0^{34}, \frac{8}{3}^9, 3^{14}, \frac{14}{3}^{21}, 6^4, 8^4, 10^2, \frac{21}{2}^8, \frac{32}{3}^9, 11^8, \frac{25}{2}^8, 14^2, 16^1, 18^5, 21^2, 24^2, 28^4, 29^2, 30^1, 32^1, 33^2, 34^1, 36^1, 42^2, \infty^{14}$	$0^9, \frac{8}{3}^3, 3^4, \frac{14}{3}^9, 8^4, \frac{21}{2}^8, \frac{32}{3}^9, \frac{25}{2}^8, 14^2, 18^2, 21^2, 28^2, 29^2, 30^1, 32^2, 33^2, 34^1, 36^1, 42^2, \infty^{89}$	$0^{35}, \frac{8}{3}^9, 3^{16}, \frac{14}{3}^{30}, 6^4, 8^8, 10^2, \frac{21}{2}^{16}, \frac{32}{3}^{18}, 11^8, \frac{25}{2}^{16}, 14^4, 16^1, 18^6, 21^4, \frac{68}{3}^{186}, 24^2, 28^6, 29^4, 30^2, 32^4, 33^4, 34^2, 36^2, 42^4, \infty^{237}$
70	$0^8, \frac{10}{3}^3, 4^3, 6^1$	$0^{35}, \frac{10}{3}^9, 4^{21}, \frac{16}{3}^{18}, 6^3, \frac{13}{2}^8, 7^4, 9^2, 10^5, 11^4, \frac{34}{3}^9, 12^4, 13^{10}, 16^1, 18^1, 22^3, 24^2, 26^1, 28^4, 30^2, 31^2, \frac{65}{2}^4, 36^1, 42^1, 45^2, \infty^{15}$	$0^9, \frac{10}{3}^3, 4^6, \frac{16}{3}^{12}, 6^1, 9^2, 10^3, 11^4, \frac{34}{3}^9, 13^{10}, 16^1, 22^3, 28^4, 30^2, 31^2, \frac{65}{2}^4, 36^1, 45^2, \infty^{93}$	$0^{36}, \frac{10}{3}^9, 4^{24}, \frac{16}{3}^{30}, 6^3, \frac{13}{2}^8, 7^4, 9^4, 10^8, 11^8, \frac{34}{3}^{18}, 12^4, 13^{20}, 16^2, 18^1, 22^6, \frac{70}{3}^{198}, 24^2, 26^1, 28^8, 30^4, 31^4, \frac{65}{2}^8, 36^2, 42^1, 45^4, \infty^{249}$

72	0^8, 2^2, 4^1, 5^2, 6^2	0^{36}, 2^{11}, 4^3, 5^{14}, 6^{24}, 7^4, $\frac{29}{4}^{16}$, 10^1, $\frac{21}{2}^4$, 12^{14}, $\frac{27}{2}^8$, 14^2, 16^1, 20^1, 23^2, 24^4, 28^2, 29^4, 30^2, 32^3, 33^2, 38^1, 40^1, 45^4, 48^1, ∞^{15}	0^9, 2^3, 4^1, 5^4, 6^{18}, 10^1, $\frac{21}{2}^4$, 12^{12}, $\frac{27}{2}^8$, 14^2, 16^1, 23^2, 28^2, 29^4, 30^2, 32^3, 33^2, 38^1, 45^4, ∞^{97}	0^{37}, 2^{12}, 4^3, 5^{16}, 6^{40}, 7^4, $\frac{29}{4}^{16}$, 10^2, $\frac{21}{2}^8$, 12^{26}, $\frac{27}{2}^{16}$, 14^4, 16^2, 20^1, 23^4, 24^{212}, 28^4, 29^8, 30^4, 32^6, 33^4, 38^2, 40^1, 45^8, 48^1, ∞^{262}
74	0^9, $\frac{8}{3}^3$, 4^1, 6^2, 10^1	0^{37}, $\frac{8}{3}^{21}$, 4^4, 6^{14}, $\frac{20}{3}^{18}$, $\frac{23}{3}^{12}$, 8^8, 10^6, 11^4, 12^4, $\frac{38}{3}^9$, 14^6, 15^2, 18^1, 20^1, 22^1, 24^3, 28^4, $\frac{86}{3}^3$, 29^2, 30^2, 33^4, 36^1, 40^1, 42^2, 45^4, ∞^{16}	0^{10}, $\frac{8}{3}^6$, 4^1, 6^3, $\frac{20}{3}^{18}$, 10^2, 11^4, 12^4, $\frac{38}{3}^9$, 14^6, 15^2, 18^1, 20^1, 24^1, 28^2, $\frac{86}{3}^3$, 29^2, 30^2, 33^4, 36^1, 40^1, 45^4, ∞^{103}	0^{38}, $\frac{8}{3}^{24}$, 4^4, 6^{15}, $\frac{20}{3}^{36}$, $\frac{23}{3}^{12}$, 8^8, 10^7, 11^8, 12^8, $\frac{38}{3}^{18}$, 14^{12}, 15^4, 18^2, 20^2, 22^1, 24^4, $\frac{74}{3}^{219}$, 28^6, $\frac{86}{3}^6$, 29^4, 30^4, 33^8, 36^2, 40^2, 42^2, 45^8, ∞^{277}
76	0^9, $\frac{10}{3}^3$, 4^2, 6^1, 10^1, 12^1	0^{38}, $\frac{10}{3}^{21}$, 4^{14}, 6^4, 7^8, $\frac{22}{3}^{21}$, $\frac{25}{3}^{12}$, 10^9, 12^8, $\frac{25}{2}^4$, $\frac{40}{3}^6$, $\frac{29}{2}^8$, 16^2, 18^3, 20^1, 22^1, 24^1, 26^2, 28^4, $\frac{88}{3}^3$, 30^3, 34^3, 36^1, 42^1, 44^1, 45^4, ∞^{17}	0^{10}, $\frac{10}{3}^6$, 4^4, 6^1, $\frac{22}{3}^{21}$, 10^2, 12^5, $\frac{25}{2}^4$, $\frac{40}{3}^6$, $\frac{29}{2}^8$, 16^2, 18^1, 20^1, 22^1, 28^4, $\frac{88}{3}^3$, 30^3, 34^3, 36^1, 42^1, 45^4, ∞^{109}	0^{39}, $\frac{10}{3}^{24}$, 4^{16}, 6^4, 7^8, $\frac{22}{3}^{42}$, $\frac{25}{3}^{12}$, 10^{10}, 12^{12}, $\frac{25}{2}^8$, $\frac{40}{3}^{12}$, $\frac{29}{2}^{16}$, 16^4, 18^4, 20^2, 22^2, 24^1, $\frac{76}{3}^{231}$, 26^2, 28^8, $\frac{88}{3}^6$, 30^6, 34^6, 36^2, 42^2, 44^1, 45^8, ∞^{292}
78	0^9, 2^2, 4^1, $\frac{9}{2}^4$, 11^2	0^{39}, 2^{12}, 4^7, $\frac{9}{2}^{28}$, 8^{35}, 9^4, 10^3, 11^{14}, 13^2, 14^9, $\frac{44}{3}^3$, 15^2, $\frac{31}{2}^4$, 16^1, 18^5, 23^2, 28^2, 29^8, 30^1, 35^4, 36^2, 45^4, 50^1, ∞^{18}	0^{10}, 2^3, 4^2, $\frac{9}{2}^8$, 8^{25}, 11^4, 13^2, 14^8, $\frac{44}{3}^3$, 15^2, $\frac{31}{2}^4$, 16^1, 18^1, 23^2, 28^2, 29^8, 30^1, 35^4, 36^2, 45^4, ∞^{114}	0^{40}, 2^{13}, 4^8, $\frac{9}{2}^{32}$, 8^{60}, 9^4, 10^3, 11^{16}, 13^4, 14^{17}, $\frac{44}{3}^6$, 15^4, $\frac{31}{2}^8$, 16^2, 18^6, 23^4, 26^{244}, 28^4, 29^{16}, 30^2, 35^8, 36^4, 45^8, 50^1, ∞^{306}
80	0^9, 3^4, 5^2, 6^1, 10^1, 12^1	0^{40}, $\frac{8}{3}^{12}$, 3^{16}, 5^{14}, 6^{11}, $\frac{26}{3}^{30}$, 9^8, 10^5, $\frac{32}{3}^6$, 12^8, 14^4, $\frac{44}{3}^3$, $\frac{31}{2}^4$, $\frac{65}{4}^8$, 18^7, 24^1, 28^2, $\frac{86}{3}^6$, 30^4, 36^6, 45^6, 48^1, ∞^{18}	0^{10}, $\frac{8}{3}^3$, 3^4, 5^4, 6^2, $\frac{26}{3}^{30}$, 10^2, 12^2, 14^4, $\frac{44}{3}^3$, $\frac{31}{2}^4$, $\frac{65}{4}^8$, 18^1, 24^1, 28^2, $\frac{86}{3}^6$, 30^4, 36^6, 45^6, ∞^{118}	0^{41}, $\frac{8}{3}^{15}$, 3^{16}, 5^{16}, 6^{12}, $\frac{26}{3}^{60}$, 9^8, 10^6, $\frac{32}{3}^6$, 12^9, 14^8, $\frac{44}{3}^6$, $\frac{31}{2}^8$, $\frac{65}{4}^{16}$, 18^8, 24^2, $\frac{80}{3}^{255}$, 28^4, $\frac{86}{3}^{12}$, 30^8, 36^{12}, 45^{12}, 48^1, ∞^{320}

3 $q = 4$.

3.1 $i = 1$.

Table 7: Slopes for $q = 4$, $i = 1$, type 0. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
0				
3				
6				$0^{\mathbf{1}}$
9				$2^{\mathbf{3}}$
12				$4^{\mathbf{6}}$
15		$\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{1}}$, $6^{\mathbf{7}}$, $\infty^{\mathbf{2}}$
18		$\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $8^{\mathbf{9}}$, $\infty^{\mathbf{5}}$
21		$\infty^{\mathbf{3}}$	$6^{\mathbf{2}}$, $\infty^{\mathbf{1}}$	$6^{\mathbf{2}}$, $10^{\mathbf{12}}$, $\infty^{\mathbf{7}}$
24		$9^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$6^{\mathbf{2}}$, $9^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$6^{\mathbf{2}}$, $9^{\mathbf{2}}$, $12^{\mathbf{16}}$, $\infty^{\mathbf{8}}$
27		$\frac{21}{2}^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $\frac{21}{2}^{\mathbf{2}}$, $12^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\frac{21}{2}^{\mathbf{4}}$, $12^{\mathbf{1}}$, $14^{\mathbf{21}}$, $\infty^{\mathbf{9}}$
30		$12^{\mathbf{1}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $3^{\mathbf{2}}$, $12^{\mathbf{2}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $3^{\mathbf{2}}$, $12^{\mathbf{3}}$, $15^{\mathbf{2}}$, $16^{\mathbf{24}}$, $\infty^{\mathbf{13}}$
33		$\frac{33}{2}^{\mathbf{2}}$, $\infty^{\mathbf{7}}$	$2^{\mathbf{3}}$, $6^{\mathbf{1}}$, $12^{\mathbf{1}}$, $\frac{33}{2}^{\mathbf{2}}$, $\infty^{\mathbf{2}}$	$2^{\mathbf{3}}$, $6^{\mathbf{1}}$, $12^{\mathbf{1}}$, $\frac{33}{2}^{\mathbf{4}}$, $18^{\mathbf{28}}$, $\infty^{\mathbf{18}}$
36		$15^{\mathbf{2}}$, $18^{\mathbf{1}}$, $\infty^{\mathbf{8}}$	$4^{\mathbf{3}}$, $6^{\mathbf{2}}$, $12^{\mathbf{1}}$, $15^{\mathbf{2}}$, $18^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$4^{\mathbf{3}}$, $6^{\mathbf{2}}$, $12^{\mathbf{1}}$, $15^{\mathbf{4}}$, $18^{\mathbf{2}}$, $20^{\mathbf{33}}$, $\infty^{\mathbf{21}}$
39		$\frac{33}{2}^{\mathbf{4}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $6^{\mathbf{1}}$, $\frac{15}{2}^{\mathbf{4}}$, $\frac{33}{2}^{\mathbf{4}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $6^{\mathbf{1}}$, $\frac{15}{2}^{\mathbf{4}}$, $\frac{33}{2}^{\mathbf{8}}$, $22^{\mathbf{39}}$, $\infty^{\mathbf{25}}$
42		$18^{\mathbf{2}}$, $\frac{39}{2}^{\mathbf{4}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $9^{\mathbf{2}}$, $12^{\mathbf{1}}$, $15^{\mathbf{2}}$, $18^{\mathbf{2}}$, $\frac{39}{2}^{\mathbf{4}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $9^{\mathbf{2}}$, $12^{\mathbf{1}}$, $15^{\mathbf{2}}$, $18^{\mathbf{4}}$, $\frac{39}{2}^{\mathbf{8}}$, $24^{\mathbf{46}}$, $\infty^{\mathbf{27}}$
45		$21^{\mathbf{4}}$, $\frac{45}{2}^{\mathbf{2}}$, $\infty^{\mathbf{12}}$	$4^{\mathbf{3}}$, $12^{\mathbf{1}}$, $18^{\mathbf{4}}$, $21^{\mathbf{4}}$, $\frac{45}{2}^{\mathbf{2}}$, $60^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$4^{\mathbf{3}}$, $12^{\mathbf{1}}$, $18^{\mathbf{4}}$, $21^{\mathbf{8}}$, $\frac{45}{2}^{\mathbf{4}}$, $26^{\mathbf{51}}$, $60^{\mathbf{1}}$, $\infty^{\mathbf{33}}$
48		$21^{\mathbf{3}}$, $24^{\mathbf{4}}$, $\infty^{\mathbf{14}}$	$4^{\mathbf{3}}$, $18^{\mathbf{4}}$, $21^{\mathbf{5}}$, $24^{\mathbf{4}}$, $60^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$4^{\mathbf{3}}$, $18^{\mathbf{4}}$, $21^{\mathbf{8}}$, $24^{\mathbf{8}}$, $28^{\mathbf{57}}$, $60^{\mathbf{1}}$, $\infty^{\mathbf{39}}$
51		$\frac{45}{2}^{\mathbf{6}}$, $24^{\mathbf{1}}$, $\frac{51}{2}^{\mathbf{2}}$, $\infty^{\mathbf{15}}$	$0^{\mathbf{1}}$, $8^{\mathbf{3}}$, $18^{\mathbf{2}}$, $21^{\mathbf{4}}$, $\frac{45}{2}^{\mathbf{6}}$, $24^{\mathbf{1}}$, $\frac{51}{2}^{\mathbf{2}}$, $60^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $8^{\mathbf{3}}$, $18^{\mathbf{2}}$, $21^{\mathbf{4}}$, $\frac{45}{2}^{\mathbf{12}}$, $24^{\mathbf{2}}$, $\frac{51}{2}^{\mathbf{4}}$, $30^{\mathbf{64}}$, $60^{\mathbf{1}}$, $\infty^{\mathbf{43}}$
54		$24^{\mathbf{3}}$, $\frac{99}{4}^{\mathbf{4}}$, $\frac{51}{2}^{\mathbf{4}}$, $\infty^{\mathbf{16}}$	$0^{\mathbf{1}}$, $3^{\mathbf{2}}$, $8^{\mathbf{3}}$, $21^{\mathbf{4}}$, $24^{\mathbf{3}}$, $\frac{99}{4}^{\mathbf{4}}$, $\frac{51}{2}^{\mathbf{4}}$, $60^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $3^{\mathbf{2}}$, $8^{\mathbf{3}}$, $21^{\mathbf{4}}$, $24^{\mathbf{6}}$, $\frac{99}{4}^{\mathbf{8}}$, $\frac{51}{2}^{\mathbf{8}}$, $32^{\mathbf{72}}$, $60^{\mathbf{1}}$, $\infty^{\mathbf{48}}$

57		26^3, 27^{10}, 30^1, ∞^{16}	2^3, 6^3, 12^1, 24^2, 26^3, 27^{10}, 30^2, 60^1, ∞^5	2^3, 6^3, 12^1, 24^2, 26^6, 27^{20}, 30^3, 34^{81}, 60^1, ∞^{51}
60	9^1	9^1, 27^2, 28^3, $\frac{57}{2}^4$, 30^3, 33^1, ∞^{20}	4^6, 9^4, 12^1, 27^2, 28^3, $\frac{57}{2}^4$, 30^3, 33^3, 60^2, ∞^6	4^6, 9^4, 12^1, 27^4, 28^6, $\frac{57}{2}^8$, 30^6, 33^4, 36^{91}, 60^2, ∞^{58}
63	12^1	12^1, $\frac{57}{2}^6$, 30^1, $\frac{63}{2}^6$, 36^1, ∞^{23}	0^1, 6^7, 12^5, $\frac{57}{2}^6$, 30^2, $\frac{63}{2}^6$, 36^2, 60^2, ∞^7	0^1, 6^7, 12^5, $\frac{57}{2}^{12}$, 30^3, $\frac{63}{2}^{12}$, 36^3, 38^{99}, 60^2, ∞^{66}
66	15^1	15^1, 30^4, 31^6, 33^3, 39^3, ∞^{25}	0^1, 8^9, 12^1, 15^4, 30^4, 31^6, 33^5, 39^3, 60^2, ∞^7	0^1, 8^9, 12^1, 15^4, 30^8, 31^{12}, 33^8, 39^6, 40^{108}, 60^2, ∞^{72}
69	18^1	18^1, $\frac{65}{2}^6$, 33^8, 39^4, ∞^{27}	6^2, 10^9, 12^1, 18^3, 30^3, $\frac{65}{2}^6$, 33^8, 36^1, 39^4, 60^1, ∞^8	6^2, 10^9, 12^1, 18^3, 30^3, $\frac{65}{2}^{12}$, 33^{16}, 36^1, 39^8, 42^{118}, 60^1, ∞^{79}
72	9^1	9^1, 33^3, $\frac{69}{2}^8$, 35^6, 42^4, ∞^{28}	6^2, 9^2, 12^7, 20^3, 21^2, 24^1, 30^2, 33^3, $\frac{69}{2}^8$, 35^6, 36^1, 42^4, 60^1, ∞^8	6^2, 9^2, 12^7, 20^3, 21^2, 24^1, 30^2, 33^6, $\frac{69}{2}^{16}$, 35^{12}, 36^1, 42^8, 44^{129}, 60^1, ∞^{84}
75	$\frac{21}{2}^2$	$\frac{21}{2}^2$, $\frac{69}{2}^6$, 36^2, $\frac{73}{2}^6$, $\frac{75}{2}^4$, 42^3, ∞^{32}	0^1, $\frac{21}{2}^4$, 12^1, 14^6, 18^2, 24^5, 30^1, 33^4, $\frac{69}{2}^6$, 36^2, $\frac{73}{2}^6$, $\frac{75}{2}^4$, 42^3, 60^1, ∞^9	0^1, $\frac{21}{2}^4$, 12^1, 14^6, 18^2, 24^5, 30^1, 33^4, $\frac{69}{2}^{12}$, 36^4, $\frac{73}{2}^{12}$, $\frac{75}{2}^8$, 42^6, 46^{141}, 60^1, ∞^{92}
78	12^1, 15^1	12^1, 15^1, 36^3, $\frac{147}{4}^8$, 37^3, 39^6, 45^1, 63^1, ∞^{36}	0^1, 3^2, 12^3, 15^4, 16^6, 21^2, 24^3, 33^6, 36^3, $\frac{147}{4}^8$, 37^3, 39^6, 45^1, 60^1, 63^1, ∞^{10}	0^1, 3^2, 12^3, 15^4, 16^6, 21^2, 24^3, 33^6, 36^6, $\frac{147}{4}^{16}$, 37^6, 39^{12}, 45^2, 48^{151}, 60^1, 63^2, ∞^{102}
81	$\frac{33}{2}^2$	$\frac{33}{2}^2$, 38^6, $\frac{77}{2}^6$, 39^4, $\frac{81}{2}^6$, $\frac{129}{2}^2$, ∞^{39}	2^3, 6^1, 12^1, $\frac{33}{2}^8$, 18^4, 21^4, 28^3, 30^2, 36^3, 38^6, $\frac{77}{2}^6$, 39^4, $\frac{81}{2}^6$, 60^1, $\frac{129}{2}^2$, ∞^{11}	2^3, 6^1, 12^1, $\frac{33}{2}^8$, 18^4, 21^4, 28^3, 30^2, 36^3, 38^{12}, $\frac{77}{2}^{12}$, 39^8, $\frac{81}{2}^{12}$, 50^{162}, 60^1, $\frac{129}{2}^4$, ∞^{111}
84	18^1, 33^1	18^1, 33^1, 39^4, 40^9, $\frac{81}{2}^4$, 41^3, 42^4, 66^1, 69^1, ∞^{42}	4^3, 6^2, 12^1, 18^4, 20^3, 21^2, $\frac{93}{4}^8$, 30^2, 33^4, 36^2, 39^4, 40^9, $\frac{81}{2}^4$, 41^3, 42^4, 48^1, 66^1, 69^1, ∞^{12}	4^3, 6^2, 12^1, 18^4, 20^3, 21^2, $\frac{93}{4}^8$, 30^2, 33^4, 36^2, 39^8, 40^{18}, $\frac{81}{2}^8$, 41^6, 42^8, 48^1, 52^{174}, 66^2, 69^2, ∞^{120}

87	$24^1, 36^1$	$24^1, 36^1, \frac{81}{2}^8, 42^2, \frac{339}{8}^8, \frac{85}{2}^6, 45^4, \frac{141}{2}^2, \infty^{43}$	$0^1, 6^1, \frac{15}{2}^4, 22^3, \frac{45}{2}^4, 24^4, \frac{51}{2}^4, 30^1, \frac{63}{2}^4, 36^6, \frac{81}{2}^8, 42^2, \frac{339}{8}^8, \frac{85}{2}^6, 45^4, 48^1, \frac{141}{2}^2, \infty^{12}$	$0^1, 6^1, \frac{15}{2}^4, 22^3, \frac{45}{2}^4, 24^4, \frac{51}{2}^4, 30^1, \frac{63}{2}^4, 36^6, \frac{81}{2}^{16}, 42^4, \frac{339}{8}^{16}, \frac{85}{2}^{12}, 45^8, 48^1, 54^{187}, \frac{141}{2}^4, \infty^{126}$
90	$24^1, 39^2$	$24^1, 39^2, 42^4, \frac{87}{8}^8, 44^3, \frac{177}{4}^4, 45^6, \frac{189}{4}^4, 63^1, 72^1, \infty^{47}$	$0^1, 9^6, 12^1, 24^5, 26^6, 33^{10}, 39^8, 42^4, \frac{87}{2}^8, 44^3, \frac{177}{4}^4, 45^6, \frac{189}{4}^4, 63^1, 72^1, \infty^{13}$	$0^1, 9^6, 12^1, 24^5, 26^6, 33^{10}, 39^8, 42^8, \frac{87}{2}^{16}, 44^6, \frac{177}{4}^8, 45^{12}, \frac{189}{4}^8, 56^{201}, 63^2, 72^2, \infty^{135}$
93	$30^1, 42^2$	$30^1, 42^2, \frac{89}{2}^6, 45^8, 46^3, \frac{93}{2}^6, 48^4, 51^2, 66^1, \frac{141}{2}^2, \infty^{52}$	$4^3, \frac{21}{2}^4, 12^1, 14^3, 28^6, 30^6, \frac{69}{2}^4, 36^3, 42^{10}, \frac{89}{2}^6, 45^8, 46^3, \frac{93}{2}^6, 48^4, 51^2, 66^1, \frac{141}{2}^2, 126^1, \infty^{14}$	$4^3, \frac{21}{2}^4, 12^1, 14^3, 28^6, 30^6, \frac{69}{2}^4, 36^3, 42^{10}, \frac{89}{2}^{12}, 45^{16}, 46^6, \frac{93}{2}^{12}, 48^8, 51^4, 58^{213}, 66^2, \frac{141}{2}^4, 126^1, \infty^{147}$
96	$30^1, 33^1, 45^1$	$30^1, 33^1, 45^6, 46^6, 48^7, 49^6, \frac{201}{4}^4, 54^2, 66^2, 72^2, \infty^{56}$	$4^3, 12^8, 16^3, 30^6, 32^3, 33^4, 36^7, 45^{13}, 46^6, 48^8, 49^6, \frac{201}{4}^4, 54^2, 66^2, 72^2, 132^1, \infty^{15}$	$4^3, 12^8, 16^3, 30^6, 32^3, 33^4, 36^7, 45^{18}, 46^{12}, 48^{15}, 49^{12}, \frac{201}{4}^8, 54^4, 60^{226}, 66^4, 72^4, 132^1, \infty^{158}$
99	$\frac{69}{2}^2, 48^1$	$\frac{69}{2}^2, \frac{93}{2}^{10}, 48^4, \frac{97}{2}^6, \frac{99}{2}^4, 50^6, 54^4, 69^2, \frac{153}{2}^2, \infty^{59}$	$0^1, 8^3, \frac{27}{2}^8, 14^3, 30^1, 34^3, \frac{69}{2}^8, 36^2, \frac{75}{2}^4, 42^4, \frac{93}{2}^{10}, 48^{10}, \frac{97}{2}^6, \frac{99}{2}^4, 50^6, 54^4, 60^1, 69^2, \frac{153}{2}^2, 126^1, \infty^{16}$	$0^1, 8^3, \frac{27}{2}^8, 14^3, 30^1, 34^3, \frac{69}{2}^8, 36^2, \frac{75}{2}^4, 42^4, \frac{93}{2}^{20}, 48^{13}, \frac{97}{2}^{12}, \frac{99}{2}^8, 50^{12}, 54^8, 60^1, 62^{240}, 69^4, \frac{153}{2}^4, 126^1, \infty^{168}$

Table 8: Slopes for $q = 4$, $i = 1$, type 1. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
0				$\color{blue}0^1$
3		∞^1	0^1	$0^1,\ \infty^2$
6		$3^1,\ \infty^1$	$0^1,\ 3^1$	$0^1,\ 3^2,\ \infty^3$
9		$\frac{9}{2}^2,\ \infty^1$	$0^1,\ \frac{9}{2}^2$	$0^1,\ \frac{9}{2}^4,\ \color{blue}6^1,\ \color{black}\infty^4$
12		$6^3,\ \infty^1$	$0^1,\ 6^3$	$0^1,\ 6^6,\ \color{blue}8^3,\ \color{black}\infty^5$
15		$\frac{15}{2}^4,\ \infty^1$	$0^1,\ \frac{15}{2}^4$	$0^1,\ \frac{15}{2}^8,\ \color{blue}10^6,\ \color{black}\infty^6$
18	3^1	$3^1,\ 9^3,\ \infty^3$	$0^1,\ 3^2,\ 9^3,\ \infty^1$	$0^1,\ 3^2,\ 9^6,\ \color{blue}12^{10},\ \color{black}\infty^9$
21	6^1	$6^1,\ \frac{21}{2}^4,\ \infty^4$	$0^1,\ 6^3,\ \frac{21}{2}^4,\ \infty^1$	$0^1,\ 6^3,\ \frac{21}{2}^8,\ \color{blue}14^{12},\ \color{black}\infty^{12}$
24	9^1	$9^1,\ 12^5,\ \infty^5$	$0^1,\ 9^4,\ 12^5,\ \infty^1$	$0^1,\ 9^4,\ 12^{10},\ \color{blue}16^{15},\ \color{black}\infty^{15}$
27	12^1	$12^1,\ \frac{27}{2}^6,\ \infty^6$	$0^1,\ 12^5,\ \frac{27}{2}^6,\ \infty^1$	$0^1,\ 12^5,\ \frac{27}{2}^{12},\ \color{blue}18^{19},\ \color{black}\infty^{18}$
30	3^1	$3^1,\ 15^7,\ \infty^7$	$0^1,\ 3^2,\ 15^{11},\ \infty^1$	$0^1,\ 3^2,\ 15^{18},\ \color{blue}20^{24},\ \color{black}\infty^{21}$
33	$\frac{9}{2}^2$	$\frac{9}{2}^2,\ \frac{33}{2}^6,\ 18^1,\ \infty^9$	$0^1,\ \frac{9}{2}^4,\ 6^1,\ \frac{33}{2}^6,\ 18^4,\ \infty^2$	$0^1,\ \frac{9}{2}^4,\ 6^1,\ \frac{33}{2}^{12},\ 18^5,\ \color{blue}22^{30},\ \color{black}\infty^{25}$
36	$6^1,\ 9^1$	$6^1,\ 9^1,\ 18^7,\ 21^1,\ \infty^{11}$	$0^1,\ 6^2,\ 8^3,\ 9^2,\ 18^7,\ 21^3,\ 36^1,\ \infty^2$	$0^1,\ 6^2,\ 8^3,\ 9^2,\ 18^{14},\ 21^4,\ \color{blue}24^{34},\ \color{black}36^1,\ \infty^{30}$
39	$\frac{21}{2}^2$	$\frac{21}{2}^2,\ \frac{39}{2}^8,\ 24^1,\ \infty^{13}$	$0^1,\ 10^3,\ \frac{21}{2}^4,\ 12^2,\ \frac{39}{2}^8,\ 24^2,\ 36^1,\ \infty^3$	$0^1,\ 10^3,\ \frac{21}{2}^4,\ 12^2,\ \frac{39}{2}^{16},\ 24^3,\ \color{blue}26^{39},\ \color{black}36^1,\ \infty^{36}$
42	$3^1,\ 12^1$	$3^1,\ 12^1,\ 21^9,\ 27^1,\ \infty^{15}$	$0^1,\ 3^2,\ 12^3,\ 14^6,\ 21^9,\ 27^1,\ 42^2,\ \infty^3$	$0^1,\ 3^2,\ 12^3,\ 14^6,\ 21^{18},\ 27^2,\ \color{blue}28^{45},\ \color{black}42^2,\ \infty^{41}$
45	$6^1,\ 18^1$	$6^1,\ 18^1,\ \frac{45}{2}^{10},\ 24^2,\ \infty^{16}$	$0^1,\ 6^3,\ 16^6,\ 18^3,\ \frac{45}{2}^{10},\ 24^2,\ 42^2,\ \infty^3$	$0^1,\ 6^3,\ 16^6,\ 18^3,\ \frac{45}{2}^{20},\ 24^4,\ \color{blue}30^{52},\ \color{black}42^2,\ \infty^{45}$
48	$6^2,\ 18^1$	$6^2,\ 18^1,\ 24^9,\ \frac{105}{4}^4,\ \infty^{18}$	$0^1,\ 6^4,\ 9^2,\ 18^4,\ 20^3,\ 21^2,\ 24^9,\ \frac{105}{4}^4,\ 48^1,\ \infty^4$	$0^1,\ 6^4,\ 9^2,\ 18^4,\ 20^3,\ 21^2,\ 24^{18},\ \frac{105}{4}^8,\ \color{blue}32^{60},\ \color{black}48^1,\ \infty^{50}$
51	$9^2,\ 24^1$	$9^2,\ 24^1,\ \frac{51}{2}^{10},\ \frac{57}{2}^2,\ 30^2,\ \infty^{21}$	$0^1,\ 9^4,\ 10^3,\ 12^1,\ 22^3,\ \frac{45}{2}^4,\ 24^2,\ \frac{51}{2}^{10},\ \frac{57}{2}^2,\ 30^2,\ 48^1,\ 66^1,\ \infty^4$	$0^1,\ 9^4,\ 10^3,\ 12^1,\ 22^3,\ \frac{45}{2}^4,\ 24^2,\ \frac{51}{2}^{20},\ \frac{57}{2}^4,\ 30^4,\ \color{blue}34^{66},\ \color{black}48^1,\ 66^1,\ \infty^{57}$
54	$3^1,\ 9^1,\ 24^1$	$3^1,\ 9^1,\ 24^1,\ 27^{11},\ \frac{129}{4}^4,\ \infty^{24}$	$0^1,\ 3^2,\ 9^2,\ 13^6,\ 24^5,\ 27^{15},\ \frac{129}{4}^4,\ 69^2,\ \infty^5$	$0^1,\ 3^2,\ 9^2,\ 13^6,\ 24^5,\ 27^{26},\ \frac{129}{4}^8,\ \color{blue}36^{73},\ \color{black}69^2,\ \infty^{65}$
57	$\frac{9}{2}^2,\ 12^1$	$\frac{9}{2}^2,\ 12^1,\ \frac{57}{2}^{12},\ 30^3,\ \frac{69}{2}^2,\ \infty^{26}$	$0^1,\ \frac{9}{2}^4,\ 6^1,\ 12^2,\ 14^3,\ 16^3,\ \frac{57}{2}^{20},\ 30^3,\ \frac{69}{2}^2,\ 66^1,\ 72^1,\ \infty^5$	$0^1,\ \frac{9}{2}^4,\ 6^1,\ 12^2,\ 14^3,\ 16^3,\ \frac{57}{2}^{32},\ 30^6,\ \frac{69}{2}^4,\ \color{blue}38^{81},\ \color{black}66^1,\ 72^1,\ \infty^{71}$

60	6^3	6^3, 30^{13}, 32^3, 33^2, 45^1, ∞^{28}	0^1, 6^6, 8^3, 17^6, 30^{17}, 32^3, 33^4, 36^1, 45^1, 69^2, ∞^6	0^1, 6^6, 8^3, 17^6, 30^{30}, 32^6, 33^6, 36^1, 40^{90}, 45^2, 69^2, ∞^{78}
63	$\frac{15}{2}^4$	$\frac{15}{2}^4$, $\frac{63}{2}^{12}$, 34^3, $\frac{69}{2}^4$, 36^1, 48^1, ∞^{30}	0^1, $\frac{15}{2}^8$, 10^6, 18^1, 20^3, $\frac{63}{2}^{12}$, 34^3, $\frac{69}{2}^8$, 36^3, 48^1, 66^1, 72^1, ∞^7	0^1, $\frac{15}{2}^8$, 10^6, 18^1, 20^3, $\frac{63}{2}^{24}$, 34^6, $\frac{69}{2}^{12}$, 36^4, 42^{100}, 48^2, 66^1, 72^1, ∞^{84}
66	3^1, 9^3	3^1, 9^3, 33^{13}, 36^1, $\frac{75}{2}^4$, 38^3, 51^1, ∞^{34}	0^1, 3^2, 9^6, 12^{10}, 21^2, 33^{13}, 36^4, $\frac{75}{2}^4$, 38^3, 40^3, 51^1, 68^3, 96^1, ∞^7	0^1, 3^2, 9^6, 12^{10}, 21^2, 33^{26}, 36^5, $\frac{75}{2}^8$, 38^6, 40^3, 44^{108}, 51^2, 68^3, 96^1, ∞^{93}
69	6^1, $\frac{21}{2}^2$, 18^1	6^1, $\frac{21}{2}^2$, 18^1, $\frac{69}{2}^{14}$, 36^4, 39^2, 40^3, 54^1, ∞^{37}	0^1, 6^3, $\frac{21}{2}^4$, 14^{12}, 18^2, 24^1, $\frac{69}{2}^{14}$, 36^4, 39^2, 40^6, 42^2, 54^1, 66^1, 70^3, 96^1, ∞^8	0^1, 6^3, $\frac{21}{2}^4$, 14^{12}, 18^2, 24^1, $\frac{69}{2}^{28}$, 36^8, 39^4, 40^9, 42^2, 46^{117}, 54^2, 66^1, 70^3, 96^1, ∞^{102}
72	9^1, 12^1, 18^1, 33^1	9^1, 12^1, 18^1, 33^1, 36^{15}, $\frac{153}{4}^8$, 42^3, 45^1, ∞^{39}	0^1, 9^4, 12^2, 16^{12}, 18^2, 21^2, 33^2, 36^{15}, $\frac{153}{4}^8$, 42^5, 44^3, 45^1, 68^3, 72^1, 96^1, ∞^8	0^1, 9^4, 12^2, 16^{12}, 18^2, 21^2, 33^2, 36^{30}, $\frac{153}{4}^{16}$, 42^8, 44^3, 45^2, 48^{127}, 68^3, 72^1, 96^1, ∞^{109}
75	12^1, 21^2, 36^1	12^1, 21^2, 36^1, $\frac{75}{2}^{16}$, $\frac{81}{2}^{12}$, $\frac{93}{2}^2$, ∞^{41}	0^1, 12^5, 18^{10}, 21^4, $\frac{45}{2}^4$, 36^4, $\frac{75}{2}^{16}$, $\frac{81}{2}^{12}$, 44^3, $\frac{93}{2}^2$, 48^1, 70^3, 96^1, ∞^9	0^1, 12^5, 18^{10}, 21^4, $\frac{45}{2}^4$, 36^4, $\frac{75}{2}^{32}$, $\frac{81}{2}^{24}$, 44^3, $\frac{93}{2}^4$, 48^1, 50^{138}, 70^3, 96^1, ∞^{117}
78	3^1, 15^1, 21^2, 33^1	3^1, 15^1, 21^2, 33^1, 39^{15}, $\frac{171}{4}^{16}$, 48^1, 51^1, ∞^{43}	0^1, 3^2, 15^6, 20^6, 21^4, 24^2, 25^6, 33^2, 39^{19}, $\frac{171}{4}^{16}$, 48^3, 51^1, 72^1, 81^2, ∞^{10}	0^1, 3^2, 15^6, 20^6, 21^4, 24^2, 25^6, 33^2, 39^{34}, $\frac{171}{4}^{32}$, 48^4, 51^2, 52^{150}, 72^1, 81^2, ∞^{124}
81	$\frac{9}{2}^2$, 18^2, 24^1, 36^1	$\frac{9}{2}^2$, 18^2, 24^1, 36^1, $\frac{81}{2}^{16}$, 42^3, 45^{12}, $\frac{105}{2}^2$, ∞^{48}	0^1, $\frac{9}{2}^4$, 6^1, 18^7, 22^3, 24^2, $\frac{53}{2}^{12}$, 36^2, 39^4, $\frac{81}{2}^{16}$, 42^5, 45^{12}, 48^1, $\frac{105}{2}^2$, $\frac{165}{2}^4$, ∞^{11}	0^1, $\frac{9}{2}^4$, 6^1, 18^7, 22^3, 24^2, $\frac{53}{2}^{12}$, 36^2, 39^4, $\frac{81}{2}^{32}$, 42^8, 45^{24}, 48^1, $\frac{105}{2}^4$, 54^{163}, $\frac{165}{2}^4$, ∞^{134}
84	6^1, 9^1, 21^2, 24^1, 33^1	6^1, 9^1, 21^2, 24^1, 33^1, 42^{17}, 44^6, 45^1, $\frac{189}{4}^8$, 54^1, 57^2, ∞^{52}	0^1, 6^2, 8^3, 9^2, 21^8, 24^3, 28^6, 29^6, 33^2, 42^{25}, 44^6, 45^1, $\frac{189}{4}^8$, 54^1, 57^2, 81^2, 84^2, 132^1, ∞^{12}	0^1, 6^2, 8^3, 9^2, 21^8, 24^3, 28^6, 29^6, 33^2, 42^{42}, 44^{12}, 45^2, $\frac{189}{4}^{16}$, 54^2, 56^{174}, 57^4, 81^2, 84^2, 132^1, ∞^{145}

87	$\frac{21}{2}^2$, 24^2, $\frac{69}{2}^2$	$\frac{21}{2}^2$, 24^2, $\frac{69}{2}^2$, $\frac{87}{2}^{18}$, 46^9, $\frac{93}{2}^4$, $\frac{99}{2}^4$, 60^2, 72^1, ∞^{55}	0^1, 10^3, $\frac{21}{2}^4$, 12^2, 24^9, $\frac{61}{2}^{12}$, $\frac{69}{2}^4$, 36^3, 42^2, $\frac{87}{2}^{18}$, 45^4, 46^9, $\frac{93}{2}^4$, $\frac{99}{2}^4$, 60^2, 72^1, $\frac{165}{2}^4$, 132^1, ∞^{12}	0^1, 10^3, $\frac{21}{2}^4$, 12^2, 24^9, $\frac{61}{2}^{12}$, $\frac{69}{2}^4$, 36^3, 42^2, $\frac{87}{2}^{36}$, 45^4, 46^{18}, $\frac{93}{2}^8$, $\frac{99}{2}^8$, 58^{186}, 60^4, 72^2, $\frac{165}{2}^4$, 132^1, ∞^{154}
90	3^1, 12^1, 27^2, 33^1, 36^1	3^1, 12^1, 27^2, 33^1, 36^1, 45^{19}, 48^2, $\frac{97}{2}^{12}$, 49^3, $\frac{123}{2}^4$, 75^1, ∞^{58}	0^1, 3^2, 12^3, 14^6, 27^{10}, 32^6, 33^4, 36^3, 38^6, 45^{23}, 48^2, $\frac{97}{2}^{12}$, 49^3, $\frac{123}{2}^4$, 66^2, 75^1, 84^2, 138^2, ∞^{13}	0^1, 3^2, 12^3, 14^6, 27^{10}, 32^6, 33^4, 36^3, 38^6, 45^{42}, 48^4, $\frac{97}{2}^{24}$, 49^6, 60^{199}, $\frac{123}{2}^8$, 66^2, 75^2, 84^2, 138^2, ∞^{164}
93	6^1, $\frac{21}{2}^2$, 30^2, $\frac{69}{2}^2$	6^1, $\frac{21}{2}^2$, 30^2, $\frac{69}{2}^2$, $\frac{93}{2}^{18}$, 48^4, 50^3, $\frac{101}{2}^{12}$, 51^2, $\frac{129}{2}^4$, 78^1, ∞^{61}	0^1, 6^3, $\frac{21}{2}^4$, 16^6, 18^1, 30^{11}, $\frac{69}{2}^8$, 39^4, 40^9, $\frac{93}{2}^{18}$, 48^6, 50^3, $\frac{101}{2}^{12}$, 51^2, $\frac{129}{2}^4$, 66^2, 78^1, 96^1, 138^2, ∞^{14}	0^1, 6^3, $\frac{21}{2}^4$, 16^6, 18^1, 30^{11}, $\frac{69}{2}^8$, 39^4, 40^9, $\frac{93}{2}^{36}$, 48^{10}, 50^6, $\frac{101}{2}^{24}$, 51^4, 62^{213}, $\frac{129}{2}^8$, 66^2, 78^2, 96^1, 138^2, ∞^{173}
96	6^2, 12^2, 33^3, 36^1	6^2, 12^2, 33^3, 36^1, 48^{19}, $\frac{201}{4}^8$, $\frac{105}{2}^4$, 53^9, 57^2, 66^2, 81^1, ∞^{66}	0^1, 6^4, 9^2, 12^4, 16^3, 18^2, 20^3, 33^{12}, 36^4, 40^3, 41^{12}, 42^2, 48^{19}, $\frac{201}{4}^8$, $\frac{105}{2}^4$, 53^9, 57^2, 66^2, 69^4, 81^1, 96^1, 132^1, 144^1, ∞^{15}	0^1, 6^4, 9^2, 12^4, 16^3, 18^2, 20^3, 33^{12}, 36^4, 40^3, 41^{12}, 42^2, 48^{38}, $\frac{201}{4}^{16}$, $\frac{105}{2}^8$, 53^{18}, 57^4, 64^{228}, 66^4, 69^4, 81^2, 96^1, 132^1, 144^1, ∞^{184}
99	9^2, $\frac{33}{2}^2$, 36^3, 48^1	9^2, $\frac{33}{2}^2$, 36^3, 48^1, $\frac{99}{2}^{20}$, 52^6, $\frac{105}{2}^4$, 54^3, 55^6, $\frac{117}{2}^4$, 69^2, 78^2, ∞^{71}	0^1, 9^4, 10^3, 12^1, $\frac{33}{2}^4$, 18^6, 22^3, 36^{13}, 42^3, 43^{12}, 44^3, 48^2, $\frac{99}{2}^{20}$, 52^6, $\frac{105}{2}^4$, 54^3, 55^6, $\frac{117}{2}^4$, 69^6, 78^2, 96^1, 132^2, 144^1, ∞^{16}	0^1, 9^4, 10^3, 12^1, $\frac{33}{2}^4$, 18^6, 22^3, 36^{13}, 42^3, 43^{12}, 44^3, 48^2, $\frac{99}{2}^{40}$, 52^{12}, $\frac{105}{2}^8$, 54^6, 55^{12}, $\frac{117}{2}^8$, 66^{241}, 69^8, 78^4, 96^1, 132^2, 144^1, ∞^{197}

Table 9: Slopes for $q = 4$, $i = 1$, type 2. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
0				
3				0^1
6				2^3
9		∞^1	0^1	$0^1, 4^3, \infty^2$
12		∞^2	3^2	$3^2, 6^4, \infty^4$
15		$6^1, \infty^2$	$0^1, 6^2$	$0^1, 6^3, 8^6, \infty^5$
18		$9^1, \infty^3$	$3^2, 9^1, \infty^1$	$3^2, 9^2, 10^9, \infty^8$
21		$9^2, \infty^3$	$0^1, 6^1, 9^2, \infty^1$	$0^1, 6^1, 9^4, 12^{13}, \infty^9$
24		$12^2, \infty^5$	$2^3, 12^2, 30^1, \infty^1$	$2^3, 12^4, 14^{15}, 30^1, \infty^{13}$
27		$12^3, \infty^6$	$0^1, 4^3, 12^3, 30^1, \infty^1$	$0^1, 4^3, 12^6, 16^{18}, 30^1, \infty^{16}$
30		$\frac{57}{4}^4, 15^1, \infty^6$	$2^3, 6^1, \frac{57}{4}^4, 15^1, 30^1, \infty^1$	$2^3, 6^1, \frac{57}{4}^8, 15^2, 18^{22}, 30^1, \infty^{18}$
33		$15^4, \frac{33}{2}^2, \infty^7$	$0^1, 4^3, 15^4, \frac{33}{2}^2, 30^1, \infty^2$	$0^1, 4^3, 15^8, \frac{33}{2}^4, 20^{27}, 30^1, \infty^{22}$
36		$\frac{69}{4}^8, \infty^7$	$3^2, 6^1, 15^2, \frac{69}{4}^8, \infty^2$	$3^2, 6^1, 15^2, \frac{69}{4}^{16}, 22^{33}, \infty^{24}$
39	6^1	$6^1, 18^3, \frac{39}{2}^4, \infty^{10}$	$0^1, 6^3, \frac{33}{2}^4, 18^3, \frac{39}{2}^4, \infty^3$	$0^1, 6^3, \frac{33}{2}^4, 18^6, \frac{39}{2}^8, 24^{40}, \infty^{29}$
42	9^1	$9^1, 20^3, \frac{81}{4}^4, 33^1, \infty^{12}$	$3^2, 9^4, 15^2, 18^2, 20^3, \frac{81}{4}^4, 33^1, \infty^3$	$3^2, 9^4, 15^2, 18^2, 20^6, \frac{81}{4}^8, 26^{45}, 33^2, \infty^{34}$
45	12^1	$12^1, 21^4, 22^3, \frac{45}{2}^2, 36^1, \infty^{13}$	$0^1, 6^1, 12^5, \frac{33}{2}^4, 21^4, 22^3, \frac{45}{2}^2, 36^1, \infty^3$	$0^1, 6^1, 12^5, \frac{33}{2}^4, 21^8, 22^6, \frac{45}{2}^4, 28^{51}, 36^2, \infty^{38}$
48	15^1	$15^1, 23^6, 24^3, 36^2, \infty^{15}$	$2^3, 15^6, 18^3, 23^6, 24^3, 36^2, \infty^4$	$2^3, 15^6, 18^3, 23^{12}, 24^6, 30^{58}, 36^4, \infty^{44}$
51	18^1	$18^1, 24^5, 25^6, 39^2, \infty^{16}$	$0^1, 4^3, 18^8, 24^5, 25^6, 30^1, 39^2, \infty^4$	$0^1, 4^3, 18^8, 24^{10}, 25^{12}, 30^1, 32^{66}, 39^4, \infty^{48}$
54	21^2	$21^2, 26^3, \frac{105}{4}^4, 27^4, 33^1, 39^1, \infty^{19}$	$2^3, 6^1, 9^2, 21^8, 26^3, \frac{105}{4}^4, 27^4, 30^2, 33^1, 39^1, \infty^5$	$2^3, 6^1, 9^2, 21^8, 26^6, \frac{105}{4}^8, 27^8, 30^2, 33^2, 34^{75}, 39^2, \infty^{54}$
57	24^2	$24^2, 27^6, 28^3, \frac{57}{2}^2, \frac{69}{2}^2, 42^1, \infty^{22}$	$0^1, 4^3, \frac{21}{2}^4, 24^9, 27^6, 28^3, \frac{57}{2}^2, 30^2, \frac{69}{2}^2, 42^1, \infty^5$	$0^1, 4^3, \frac{21}{2}^4, 24^9, 27^{12}, 28^6, \frac{57}{2}^4, 30^2, \frac{69}{2}^4, 36^{82}, 42^2, \infty^{61}$

60	27^2	27^2, $\frac{117}{4}^{12}$, 30^1, 36^3, ∞^{24}	3^2, 6^4, 12^2, 27^{10}, $\frac{117}{4}^{12}$, 30^3, 36^3, ∞^6	3^2, 6^4, 12^2, 27^{10}, $\frac{117}{4}^{24}$, 30^4, 36^6, 38^{90}, ∞^{68}
63	6^1, 30^1	6^1, 30^8, $\frac{63}{2}^6$, $\frac{75}{2}^4$, ∞^{27}	0^1, 6^3, 8^6, 18^1, 30^{18}, $\frac{63}{2}^6$, $\frac{75}{2}^4$, ∞^7	0^1, 6^3, 8^6, 18^1, 30^{25}, $\frac{63}{2}^{12}$, $\frac{75}{2}^8$, 40^{99}, ∞^{76}
66	9^1, 33^1	9^1, 32^6, $\frac{129}{4}^8$, 33^2, 39^5, ∞^{28}	3^2, 9^2, 10^6, 15^2, 18^1, 30^2, 32^6, $\frac{129}{4}^8$, 33^9, 39^5, ∞^7	3^2, 9^2, 10^6, 15^2, 18^1, 30^2, 32^{12}, $\frac{129}{4}^{16}$, 33^{10}, 39^{10}, 42^{109}, ∞^{81}
69	9^2, 36^1	9^2, 33^6, 34^6, $\frac{69}{2}^4$, 36^2, $\frac{81}{2}^4$, ∞^{31}	0^1, 6^1, 9^4, 12^7, $\frac{33}{2}^4$, 30^2, 33^6, 34^6, $\frac{69}{2}^4$, 36^8, $\frac{81}{2}^4$, ∞^8	0^1, 6^1, 9^4, 12^7, $\frac{33}{2}^4$, 30^2, 33^{12}, 34^{12}, $\frac{69}{2}^8$, 36^9, $\frac{81}{2}^8$, 44^{120}, ∞^{88}
72	12^2, 39^1	12^2, 35^{12}, 36^4, 39^2, 42^3, 48^2, ∞^{35}	2^3, 12^4, 14^9, 15^2, 18^2, 30^2, 35^{12}, 36^4, 39^7, 42^3, 48^2, 66^1, 126^1, ∞^8	2^3, 12^4, 14^9, 15^2, 18^2, 30^2, 35^{24}, 36^8, 39^8, 42^6, 46^{129}, 48^4, 66^1, 126^1, ∞^{97}
75	12^1, 18^1, 42^1	12^1, 18^1, 36^7, 37^{12}, 42^2, $\frac{87}{2}^2$, 51^2, ∞^{38}	0^1, 4^3, 12^2, 16^9, 18^4, $\frac{39}{2}^4$, 30^1, 36^7, 37^{12}, 42^6, $\frac{87}{2}^2$, 51^2, 66^1, 72^1, 126^1, ∞^9	0^1, 4^3, 12^2, 16^9, 18^4, $\frac{39}{2}^4$, 30^1, 36^{14}, 37^{24}, 42^7, $\frac{87}{2}^4$, 48^{139}, 51^4, 66^1, 72^1, 126^1, ∞^{106}
78	15^1, 21^2	15^1, 21^2, 38^6, $\frac{153}{4}^8$, 39^5, $\frac{165}{4}^4$, 45^1, 51^2, ∞^{41}	2^3, 6^1, 15^4, 18^7, 21^{10}, 33^2, 38^6, $\frac{153}{4}^8$, 39^5, $\frac{165}{4}^4$, 45^5, 51^2, 69^2, 126^1, ∞^{10}	2^3, 6^1, 15^4, 18^7, 21^{10}, 33^2, 38^{12}, $\frac{153}{4}^{16}$, 39^{10}, $\frac{165}{4}^8$, 45^6, 50^{150}, 51^4, 69^2, 126^1, ∞^{115}
81	21^2, 24^1	21^2, 24^1, 39^8, 40^6, $\frac{81}{2}^4$, $\frac{345}{8}^8$, 48^1, 54^2, ∞^{43}	0^1, 4^3, 18^2, 20^6, 21^4, $\frac{45}{2}^4$, 24^4, 30^1, $\frac{69}{2}^4$, 39^8, 40^6, $\frac{81}{2}^4$, $\frac{345}{8}^8$, 48^4, 54^2, 72^1, 78^1, 126^1, ∞^{11}	0^1, 4^3, 18^2, 20^6, 21^4, $\frac{45}{2}^4$, 24^4, 30^1, $\frac{69}{2}^4$, 39^{16}, 40^{12}, $\frac{81}{2}^8$, $\frac{345}{8}^{16}$, 48^5, 52^{162}, 54^4, 72^1, 78^1, 126^1, ∞^{123}
84	24^4	24^4, $\frac{165}{4}^{16}$, 42^2, $\frac{177}{4}^4$, 45^6, 48^2, 51^1, ∞^{46}	3^2, 6^1, 10^3, 22^3, 24^{14}, 27^2, 30^4, 36^2, 39^2, $\frac{165}{4}^{16}$, 42^2, $\frac{177}{4}^4$, 45^6, 48^2, 51^3, 66^1, 78^1, 126^1, ∞^{12}	3^2, 6^1, 10^3, 22^3, 24^{14}, 27^2, 30^4, 36^2, 39^2, $\frac{165}{4}^{32}$, 42^4, $\frac{177}{4}^8$, 45^{12}, 48^4, 51^4, 54^{175}, 66^1, 78^1, 126^1, ∞^{131}
87	6^1, 24^1, 27^2	6^1, 24^1, 27^2, 42^9, $\frac{87}{2}^8$, $\frac{369}{8}^8$, $\frac{93}{2}^2$, $\frac{99}{2}^4$, 54^1, ∞^{51}	0^1, 6^3, 12^6, 24^3, $\frac{51}{2}^4$, 27^4, 28^6, 30^1, 34^3, $\frac{81}{2}^4$, 42^{11}, $\frac{87}{2}^8$, $\frac{369}{8}^8$, $\frac{93}{2}^2$, $\frac{99}{2}^4$, 54^2, 66^1, 84^2, 126^2, ∞^{12}	0^1, 6^3, 12^6, 24^3, $\frac{51}{2}^4$, 27^4, 28^6, 30^1, 34^3, $\frac{81}{2}^4$, 42^{20}, $\frac{87}{2}^{16}$, $\frac{369}{8}^{16}$, $\frac{93}{2}^4$, $\frac{99}{2}^8$, 54^3, 56^{186}, 66^1, 84^2, 126^2, ∞^{142}

90	$9^1, 27^2, 33^1$	$9^1, 27^2, 33^1, 44^9, \frac{177}{4}^8, 45^2, \frac{183}{4}^4, 48^4, 51^7, 57^1, \infty^{54}$	$3^2, 9^4, 10^3, 14^3, 27^6, 30^1, 31^6, 33^4, 34^6, 42^4, 44^9, \frac{177}{4}^8, 45^2, \frac{183}{4}^4, 48^4, 51^7, 57^1, 72^2, 87^2, 126^2, \infty^{13}$	$3^2, 9^4, 10^3, 14^3, 27^6, 30^1, 31^6, 33^4, 34^6, 42^4, 44^{18}, \frac{177}{4}^{16}, 45^4, \frac{183}{4}^8, 48^8, 51^{14}, 57^2, 58^{198}, 72^2, 87^2, 126^2, \infty^{152}$
93	$12^1, 30^1, 36^2$	$12^1, 30^1, 36^2, 45^{10}, 46^9, \frac{93}{2}^4, 48^6, \frac{105}{2}^8, 54^1, \infty^{57}$	$0^1, 6^1, 12^{11}, 30^3, 32^6, 36^7, 38^6, \frac{81}{2}^4, 45^{10}, 46^9, \frac{93}{2}^4, 48^8, \frac{105}{2}^8, 54^1, 72^2, 84^2, 126^2, \infty^{14}$	$0^1, 6^1, 12^{11}, 30^3, 32^6, 36^7, 38^6, \frac{81}{2}^4, 45^{20}, 46^{18}, \frac{93}{2}^8, 48^{14}, \frac{105}{2}^{16}, 54^2, 60^{211}, 72^2, 84^2, 126^2, \infty^{162}$
96	$15^1, 36^2, 39^1$	$15^1, 36^2, 39^1, 47^{18}, 48^7, \frac{201}{4}^4, 51^3, 54^{10}, \infty^{59}$	$2^3, 12^4, 14^3, 15^4, 35^6, 36^8, 38^3, 39^6, 42^4, 47^{18}, 48^9, \frac{201}{4}^4, 51^3, 54^{10}, 78^1, 87^2, 126^2, \infty^{15}$	$2^3, 12^4, 14^3, 15^4, 35^6, 36^8, 38^3, 39^6, 42^4, 47^{36}, 48^{16}, \frac{201}{4}^8, 51^6, 54^{20}, 62^{225}, 78^1, 87^2, 126^2, \infty^{171}$
99	$12^2, 36^1, 39^2$	$12^2, 36^1, 39^2, 48^9, 49^{18}, \frac{105}{2}^{10}, \frac{111}{2}^8, \infty^{62}$	$0^1, 4^3, 12^4, 15^4, 18^3, 20^3, 36^4, 39^8, 40^3, \frac{81}{2}^4, 42^6, \frac{93}{2}^4, 48^9, 49^{18}, \frac{105}{2}^{10}, \frac{111}{2}^8, 78^1, 96^1, 126^2, \infty^{16}$	$0^1, 4^3, 12^4, 15^4, 18^3, 20^3, 36^4, 39^8, 40^3, \frac{81}{2}^4, 42^6, \frac{93}{2}^4, 48^{18}, 49^{36}, \frac{105}{2}^{20}, \frac{111}{2}^{16}, 64^{240}, 78^1, 96^1, 126^2, \infty^{180}$

3.2 $i = 2$.

Table 10: Slopes for $q = 4$, $i = 2$, type 0. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
0				
3				
6				0^1
9				1^3
12				2^6
15		0^1	0^1	$0^2,\ 3^7,\ \infty^1$
18		$0^1,\ \infty^1$	$0^1,\ \infty^1$	$0^2,\ 4^9,\ \infty^4$
21		$3^2,\ \infty^1$	$3^2,\ \infty^1$	$3^4,\ 5^{12},\ \infty^5$
24		$0^1,\ 3^2,\ \infty^1$	$3^2,\ \infty^2$	$0^1,\ 3^4,\ 6^{16},\ \infty^7$
27		$0^3,\ 6^1,\ \infty^1$	$0^1,\ 6^1,\ \infty^3$	$0^4,\ 6^2,\ 7^{21},\ \infty^9$
30		$0^2,\ \frac{3}{2}^2,\ 6^2,\ \infty^1$	$0^1,\ \frac{3}{2}^2,\ 6^1,\ \infty^3$	$0^3,\ \frac{3}{2}^4,\ 6^3,\ 8^{24},\ \infty^{11}$
33		$1^3,\ 3^1,\ 6^3,\ \infty^2$	$1^3,\ 3^1,\ 6^1,\ \infty^4$	$1^6,\ 3^2,\ 6^4,\ 9^{28},\ \infty^{15}$
36		$0^2,\ 2^3,\ 3^2,\ 6^2,\ \infty^2$	$2^3,\ 3^2,\ 6^1,\ \infty^5$	$0^2,\ 2^6,\ 3^4,\ 6^3,\ 10^{33},\ \infty^{18}$
39		$0^5,\ 3^1,\ \frac{15}{4}^4,\ \infty^3$	$0^1,\ 3^1,\ \frac{15}{4}^4,\ \infty^7$	$0^6,\ 3^2,\ \frac{15}{4}^8,\ 11^{39},\ \infty^{23}$
42		$0^3,\ 3^4,\ \frac{9}{2}^2,\ 6^1,\ \frac{15}{2}^2,\ \infty^3$	$0^1,\ \frac{9}{2}^2,\ 6^1,\ \frac{15}{2}^2,\ \infty^9$	$0^4,\ 3^4,\ \frac{9}{2}^4,\ 6^2,\ \frac{15}{2}^4,\ 12^{46},\ \infty^{27}$
45		$2^3,\ 3^4,\ 6^3,\ 9^4,\ 30^1,\ \infty^3$	$2^3,\ 6^1,\ 9^4,\ 30^1,\ \infty^9$	$2^6,\ 3^4,\ 6^4,\ 9^8,\ 13^{51},\ 30^2,\ \infty^{30}$
48		$0^3,\ 2^3,\ 6^4,\ 9^4,\ \frac{21}{2}^2,\ 30^1,\ \infty^4$	$2^3,\ 9^4,\ \frac{21}{2}^2,\ 30^1,\ \infty^{11}$	$0^3,\ 2^6,\ 6^4,\ 9^8,\ \frac{21}{2}^4,\ 14^{57},\ 30^2,\ \infty^{36}$
51		$0^7,\ 3^1,\ 4^3,\ 6^2,\ 9^2,\ \frac{21}{2}^4,\ 30^1,\ \infty^4$	$0^1,\ 4^3,\ 9^2,\ \frac{21}{2}^4,\ 30^1,\ \infty^{13}$	$0^8,\ 3^1,\ 4^6,\ 6^2,\ 9^4,\ \frac{21}{2}^8,\ 15^{64},\ 30^2,\ \infty^{41}$
54		$0^4,\ \frac{3}{2}^6,\ 3^4,\ 4^3,\ \frac{21}{2}^4,\ 30^1,\ \infty^5$	$0^1,\ \frac{3}{2}^2,\ 4^3,\ \frac{21}{2}^4,\ 30^1,\ \infty^{16}$	$0^5,\ \frac{3}{2}^8,\ 3^4,\ 4^6,\ \frac{21}{2}^8,\ 16^{72},\ 30^2,\ \infty^{48}$
57		$1^6,\ 3^{13},\ 6^1,\ 9^1,\ 12^2,\ 15^1,\ 30^1,\ \infty^5$	$1^3,\ 3^3,\ 6^1,\ 12^2,\ 15^1,\ 30^1,\ \infty^{19}$	$1^9,\ 3^{16},\ 6^2,\ 9^1,\ 12^4,\ 15^2,\ 17^{81},\ 30^2,\ \infty^{54}$
60	0^1	$0^4,\ 2^9,\ 3^4,\ \frac{9}{2}^2,\ 6^4,\ 12^1,\ \frac{33}{2}^2,\ 30^2,\ \infty^6$	$0^1,\ 2^6,\ \frac{9}{2}^2,\ 6^1,\ \frac{33}{2}^2,\ 30^2,\ \infty^{20}$	$0^4,\ 2^{15},\ 3^4,\ \frac{9}{2}^4,\ 6^5,\ 12^1,\ \frac{33}{2}^4,\ 18^{91},\ 30^4,\ \infty^{58}$
63	0^1	$0^9,\ 3^8,\ 6^9,\ 15^2,\ 18^1,\ 30^2,\ \infty^7$	$0^2,\ 3^7,\ 6^3,\ 15^1,\ 18^1,\ 30^2,\ \infty^{22}$	$0^{10},\ 3^{15},\ 6^{12},\ 15^3,\ 18^2,\ 19^{99},\ 30^4,\ \infty^{65}$

66	6^1	0^5, 2^6, 4^9, 6^6, $\frac{15}{2}^2$, $\frac{33}{2}^2$, 18^3, 30^2, ∞^7	0^1, 4^9, 6^2, $\frac{15}{2}^2$, $\frac{33}{2}^2$, 30^2, ∞^{24}	0^6, 2^6, 4^{18}, 6^7, $\frac{15}{2}^4$, $\frac{33}{2}^4$, 18^3, 20^{108}, 30^4, ∞^{71}
69	6^1	2^6, 3^{10}, 5^9, 6^3, 9^1, 15^7, 18^1, 30^1, ∞^8	3^2, 5^9, 6^2, 9^1, 15^3, 18^1, 30^1, ∞^{27}	2^6, 3^{12}, 5^{18}, 6^4, 9^2, 15^{10}, 18^2, 21^{118}, 30^2, ∞^{79}
72	0^1	0^5, 3^{10}, 4^6, 6^7, 10^3, $\frac{21}{2}^2$, 12^1, 15^2, 18^5, 30^1, ∞^8	0^1, 3^2, 6^7, 10^3, $\frac{21}{2}^2$, 12^1, 15^2, 18^1, 30^1, ∞^{30}	0^5, 3^{12}, 4^6, 6^{14}, 10^6, $\frac{21}{2}^4$, 12^2, 15^4, 18^6, 22^{129}, 30^2, ∞^{86}
75	0^2	0^{11}, 3^2, 4^6, 6^5, 7^6, 9^2, 12^5, 15^4, $\frac{33}{2}^4$, 30^1, ∞^9	0^3, 6^1, 7^6, 9^2, 12^5, 15^1, $\frac{33}{2}^4$, 30^1, ∞^{32}	0^{12}, 3^2, 4^6, 6^6, 7^{12}, 9^4, 12^{10}, 15^5, $\frac{33}{2}^8$, 23^{141}, 30^2, ∞^{92}
78	0^1, 6^1	0^6, $\frac{3}{2}^{10}$, 2^3, 6^9, $\frac{15}{2}^2$, 8^6, $\frac{21}{2}^2$, 12^3, $\frac{33}{2}^6$, 18^1, 30^1, 54^1, ∞^{10}	0^2, $\frac{3}{2}^2$, 6^2, $\frac{15}{2}^2$, 8^6, $\frac{21}{2}^2$, 12^3, $\frac{33}{2}^6$, 30^1, ∞^{34}	0^7, $\frac{3}{2}^{12}$, 2^3, 6^{10}, $\frac{15}{2}^4$, 8^{12}, $\frac{21}{2}^4$, 12^6, $\frac{33}{2}^{12}$, 18^1, 24^{151}, 30^2, 54^1, ∞^{100}
81	6^2	1^9, 2^6, 3^5, 6^{11}, $\frac{33}{4}^4$, 9^4, $\frac{21}{2}^4$, 14^3, 15^2, 18^3, 30^1, 54^2, ∞^{11}	1^3, 3^1, 6^3, $\frac{33}{4}^4$, 9^4, $\frac{21}{2}^4$, 14^3, 15^2, 18^3, 30^1, ∞^{37}	1^{12}, 2^6, 3^6, 6^{12}, $\frac{33}{4}^8$, 9^8, $\frac{21}{2}^8$, 14^6, 15^4, 18^6, 25^{162}, 30^2, 54^2, ∞^{109}
84	0^1, 6^1	0^6, 2^{12}, 3^6, 4^3, 6^7, 9^2, 10^3, $\frac{21}{2}^2$, $\frac{93}{8}^8$, 15^2, $\frac{33}{2}^2$, 18^2, 24^1, 54^1, 60^1, ∞^{12}	0^1, 2^3, 3^2, 6^2, 9^2, 10^3, $\frac{21}{2}^2$, $\frac{93}{8}^8$, 15^2, $\frac{33}{2}^2$, 18^2, 24^1, ∞^{40}	0^6, 2^{15}, 3^8, 4^3, 6^8, 9^4, 10^6, $\frac{21}{2}^4$, $\frac{93}{8}^{16}$, 15^4, $\frac{33}{2}^4$, 18^4, 24^2, 26^{174}, 54^1, 60^1, ∞^{118}
87	0^2	0^{13}, 3^3, $\frac{15}{4}^{12}$, 4^6, 9^4, 11^3, $\frac{45}{4}^4$, 12^2, $\frac{51}{4}^4$, 15^1, $\frac{63}{4}^4$, 18^4, 24^1, 60^2, ∞^{12}	0^3, 3^1, $\frac{15}{4}^4$, 11^3, $\frac{45}{4}^4$, 12^2, $\frac{51}{4}^4$, 15^1, $\frac{63}{4}^4$, 18^4, 24^1, ∞^{44}	0^{14}, 3^4, $\frac{15}{4}^{16}$, 4^6, 9^4, 11^6, $\frac{45}{4}^8$, 12^4, $\frac{51}{4}^8$, 15^2, $\frac{63}{4}^8$, 18^8, 24^2, 27^{187}, 60^2, ∞^{127}
90	0^1, 3^2	0^7, 3^{12}, 4^3, $\frac{9}{2}^{10}$, 6^7, $\frac{21}{2}^4$, 12^3, 13^6, $\frac{33}{2}^{10}$, $\frac{39}{2}^4$, 42^1, 60^1, ∞^{13}	0^2, 3^2, $\frac{9}{2}^6$, 6^1, 12^3, 13^6, $\frac{33}{2}^{10}$, $\frac{39}{2}^4$, ∞^{47}	0^8, 3^{12}, 4^3, $\frac{9}{2}^{16}$, 6^8, $\frac{21}{2}^4$, 12^6, 13^{12}, $\frac{33}{2}^{20}$, $\frac{39}{2}^8$, 28^{201}, 42^1, 60^1, ∞^{135}
93	3^2, 6^1	2^9, 3^{12}, 5^3, $\frac{21}{4}^4$, 6^9, 7^3, 9^4, 14^6, 15^6, $\frac{69}{4}^4$, 18^3, 21^6, 45^1, 54^2, 63^1, ∞^{14}	2^3, 3^2, $\frac{21}{4}^4$, 6^2, 7^3, 14^6, 15^4, $\frac{69}{4}^4$, 18^3, 21^6, 63^1, ∞^{49}	2^{12}, 3^{12}, 5^3, $\frac{21}{4}^8$, 6^{10}, 7^6, 9^4, 14^{12}, 15^{10}, $\frac{69}{4}^8$, 18^6, 21^{12}, 29^{213}, 45^1, 54^2, 63^2, ∞^{144}
96	0^1, 6^2	0^7, 2^9, 6^{19}, 8^9, $\frac{21}{2}^4$, 15^4, 16^3, $\frac{33}{2}^2$, 18^9, $\frac{45}{2}^6$, 24^1, 42^2, 54^2, 66^1, ∞^{15}	0^1, 2^3, 6^{10}, 8^3, 15^4, 16^3, $\frac{33}{2}^2$, 18^7, $\frac{45}{2}^6$, 24^1, 66^1, ∞^{52}	0^7, 2^{12}, 6^{27}, 8^{12}, $\frac{21}{2}^4$, 15^8, 16^6, $\frac{33}{2}^4$, 18^{16}, $\frac{45}{2}^{12}$, 24^2, 30^{226}, 42^2, 54^2, 66^2, ∞^{154}

| 99 | 0^2, 6^1 | 0^{15}, 3^3, 4^9, 6^6, $\frac{27}{4}^8$, 7^9, 15^5, 17^3, $\frac{69}{4}^4$, 18^2, $\frac{75}{4}^4$, 21^4, 24^5, 30^1, 45^2, 60^2, 63^1, ∞^{16} | 0^3, 4^3, 6^1, $\frac{27}{4}^8$, 7^3, 15^1, 17^3, $\frac{69}{4}^4$, 18^2, $\frac{75}{4}^4$, 21^4, 24^5, 30^1, 63^1, ∞^{56} | 0^{16}, 3^3, 4^{12}, 6^6, $\frac{27}{4}^{16}$, 7^{12}, 15^6, 17^6, $\frac{69}{4}^8$, 18^4, $\frac{75}{4}^8$, 21^8, 24^{10}, 30^2, 31^{240}, 45^2, 60^2, 63^2, ∞^{165} |

Table 11: Slopes for $q = 4$, $i = 2$, type 1. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
0				0^1
3		0^1	0^1	0^2, ∞^1
6		0^2	0^1, ∞^1	0^3, ∞^3
9		0^3	0^1, ∞^2	0^4, 3^1, ∞^5
12		0^4	0^1, ∞^3	0^5, 4^3, ∞^7
15		0^5	0^1, ∞^4	0^6, 5^6, ∞^9
18	0^1	0^6, ∞^1	0^2, ∞^5	0^7, 6^{10}, ∞^{11}
21	0^1	0^7, 3^1, ∞^1	0^2, 3^1, ∞^6	0^8, 3^2, 7^{12}, ∞^{14}
24	0^1	0^8, $\frac{9}{2}^2$, ∞^1	0^2, $\frac{9}{2}^2$, ∞^7	0^9, $\frac{9}{2}^4$, 8^{15}, ∞^{17}
27	0^1	0^9, 6^3, ∞^1	0^2, 6^3, ∞^8	0^{10}, 6^6, 9^{19}, ∞^{20}
30	0^1	0^{10}, $\frac{15}{2}^4$, ∞^1	0^2, $\frac{15}{2}^4$, ∞^9	0^{11}, $\frac{15}{2}^8$, 10^{24}, ∞^{23}
33	0^2	0^{11}, 3^2, 9^3, ∞^2	0^3, 3^1, 9^3, ∞^{11}	0^{12}, 3^3, 9^6, 11^{30}, ∞^{27}
36	0^2	0^{12}, 4^3, 6^1, $\frac{21}{2}^2$, 18^1, ∞^2	0^3, 4^3, $\frac{21}{2}^2$, 18^1, ∞^{12}	0^{13}, 4^6, 6^1, $\frac{21}{2}^4$, 12^{34}, 18^2, ∞^{31}
39	0^2	0^{13}, 5^3, 6^2, 9^1, 12^1, 18^1, ∞^3	0^3, 5^3, 6^2, 12^1, 18^1, ∞^{14}	0^{14}, 5^6, 6^4, 9^1, 12^2, 13^{39}, 18^2, ∞^{37}
42	0^2	0^{14}, 6^1, 7^6, 12^1, 21^2, ∞^3	0^3, 6^1, 7^6, 21^2, ∞^{15}	0^{15}, 6^2, 7^{12}, 12^1, 14^{45}, 21^4, ∞^{41}
45	0^2	0^{15}, 3^3, 8^6, 9^1, 21^2, ∞^3	0^3, 3^1, 8^6, 9^1, 21^2, ∞^{17}	0^{16}, 3^4, 8^{12}, 9^2, 15^{52}, 21^4, ∞^{46}
48	0^3	0^{16}, $\frac{9}{2}^6$, 9^2, 10^3, $\frac{21}{2}^2$, 24^1, ∞^4	0^4, $\frac{9}{2}^2$, 9^2, 10^3, $\frac{21}{2}^2$, 24^1, ∞^{20}	0^{17}, $\frac{9}{2}^8$, 9^4, 10^6, $\frac{21}{2}^4$, 16^{60}, 24^2, ∞^{52}
51	0^3	0^{17}, 5^3, 6^3, 9^2, 11^3, $\frac{45}{4}^4$, 24^1, 33^1, ∞^4	0^4, 5^3, 6^1, 11^3, $\frac{45}{4}^4$, 24^1, 33^1, ∞^{21}	0^{18}, 5^6, 6^4, 9^2, 11^6, $\frac{45}{4}^8$, 17^{66}, 24^2, 33^2, ∞^{57}
54	0^3	0^{18}, $\frac{13}{2}^6$, $\frac{21}{2}^4$, 12^3, $\frac{27}{2}^4$, $\frac{69}{2}^2$, ∞^5	0^4, $\frac{13}{2}^6$, 12^3, $\frac{27}{2}^4$, $\frac{69}{2}^2$, ∞^{23}	0^{19}, $\frac{13}{2}^{12}$, $\frac{21}{2}^4$, 12^6, $\frac{27}{2}^8$, 18^{73}, $\frac{69}{2}^4$, ∞^{64}
57	0^3	0^{19}, 3^4, 7^3, 8^3, 12^2, $\frac{57}{4}^8$, 33^1, 36^1, ∞^5	0^4, 3^1, 7^3, 8^3, $\frac{57}{4}^8$, 33^1, 36^1, ∞^{25}	0^{20}, 3^5, 7^6, 8^6, 12^2, $\frac{57}{4}^{16}$, 19^{81}, 33^2, 36^2, ∞^{70}
60	0^3	0^{20}, 4^6, 6^2, $\frac{17}{2}^6$, 15^4, $\frac{33}{2}^2$, 18^1, 30^1, $\frac{69}{2}^2$, ∞^6	0^4, 4^3, $\frac{17}{2}^6$, 15^4, $\frac{33}{2}^2$, 18^1, $\frac{69}{2}^2$, ∞^{28}	0^{21}, 4^9, 6^2, $\frac{17}{2}^{12}$, 15^8, $\frac{33}{2}^4$, 18^2, 20^{90}, 30^1, $\frac{69}{2}^4$, ∞^{78}

63	0^4	0^{21}, 5^9, 6^4, 9^2, 10^3, $\frac{69}{4}^4$, 18^2, 33^2, 36^1, ∞^7	0^5, 5^6, 9^1, 10^3, $\frac{69}{4}^4$, 18^2, 33^1, 36^1, ∞^{32}	0^{22}, 5^{15}, 6^4, 9^3, 10^6, $\frac{69}{4}^8$, 18^4, 21^{100}, 33^3, 36^2, ∞^{86}
66	0^4	0^{22}, 6^{11}, 9^4, 10^3, $\frac{21}{2}^2$, 18^3, 20^3, 34^3, 36^1, 48^1, ∞^7	0^5, 6^{10}, $\frac{21}{2}^2$, 18^3, 20^3, 34^3, 48^1, ∞^{33}	0^{23}, 6^{21}, 9^4, 10^3, $\frac{21}{2}^4$, 18^6, 20^6, 22^{108}, 34^6, 36^1, 48^2, ∞^{92}
69	0^4	0^{23}, 3^5, 7^{12}, 9^2, 11^3, 12^1, 20^3, 21^2, 33^1, 35^3, 39^1, 48^1, ∞^8	0^5, 3^1, 7^{12}, 12^1, 20^3, 21^2, 33^1, 35^3, 48^1, ∞^{36}	0^{24}, 3^6, 7^{24}, 9^2, 11^3, 12^2, 20^6, 21^4, 23^{117}, 33^2, 35^6, 39^1, 48^2, ∞^{101}
72	0^4	0^{24}, $\frac{9}{2}^{10}$, 8^{12}, $\frac{21}{2}^2$, 12^3, 18^1, 21^2, 22^3, 34^3, 36^1, 48^1, ∞^8	0^5, $\frac{9}{2}^2$, 8^{12}, $\frac{21}{2}^2$, 21^2, 22^3, 34^3, 36^1, 48^1, ∞^{39}	0^{25}, $\frac{9}{2}^{12}$, 8^{24}, $\frac{21}{2}^4$, 12^3, 18^1, 21^4, 22^6, 24^{127}, 34^6, 36^2, 48^2, ∞^{109}
75	0^4	0^{25}, 6^{15}, 9^{10}, $\frac{45}{4}^4$, 18^4, 22^3, 24^1, 35^3, 48^1, ∞^9	0^5, 6^3, 9^{10}, $\frac{45}{4}^4$, 18^2, 22^3, 24^1, 35^3, 48^1, ∞^{43}	0^{26}, 6^{18}, 9^{20}, $\frac{45}{4}^8$, 18^6, 22^6, 24^2, 25^{138}, 35^6, 48^2, ∞^{119}
78	0^5	0^{26}, $\frac{15}{2}^{20}$, 10^6, 12^2, $\frac{25}{2}^6$, 18^1, $\frac{39}{2}^4$, 24^3, 36^1, $\frac{81}{2}^2$, ∞^{10}	0^6, $\frac{15}{2}^4$, 10^6, 12^2, $\frac{25}{2}^6$, $\frac{39}{2}^4$, 24^2, 36^1, $\frac{81}{2}^2$, ∞^{48}	0^{27}, $\frac{15}{2}^{24}$, 10^{12}, 12^4, $\frac{25}{2}^{12}$, 18^1, $\frac{39}{2}^8$, 24^5, 26^{150}, 36^2, $\frac{81}{2}^4$, ∞^{129}
81	0^5, 3^1	0^{27}, 3^6, 9^{15}, 11^3, $\frac{53}{4}^{12}$, $\frac{39}{2}^4$, 21^2, 24^3, $\frac{165}{4}^4$, ∞^{11}	0^6, 3^2, 9^3, 11^3, $\frac{53}{4}^{12}$, $\frac{39}{2}^4$, 21^2, 24^1, $\frac{165}{4}^4$, ∞^{50}	0^{28}, 3^7, 9^{18}, 11^6, $\frac{53}{4}^{24}$, $\frac{39}{2}^8$, 21^4, 24^4, 27^{163}, $\frac{165}{4}^8$, ∞^{136}
84	0^5, 6^1	0^{28}, 4^9, 6^3, $\frac{21}{2}^{12}$, 12^1, 14^6, $\frac{29}{2}^6$, 21^8, 24^1, 30^2, $\frac{81}{2}^2$, 42^2, 66^1, ∞^{12}	0^6, 4^3, 6^1, $\frac{21}{2}^4$, 12^1, 14^6, $\frac{29}{2}^6$, 21^8, $\frac{81}{2}^2$, 42^2, 66^1, ∞^{53}	0^{29}, 4^{12}, 6^3, $\frac{21}{2}^{16}$, 12^2, 14^{12}, $\frac{29}{2}^{12}$, 21^{16}, 24^1, 28^{174}, 30^2, $\frac{81}{2}^4$, 42^4, 66^2, ∞^{146}
87	0^5, 9^1	0^{29}, 5^{12}, 6^6, 9^2, 12^9, $\frac{61}{4}^{12}$, 18^3, 21^2, $\frac{45}{2}^4$, 33^2, $\frac{165}{4}^4$, 57^1, 66^1, ∞^{12}	0^6, 5^3, 6^2, 9^1, 12^5, $\frac{61}{4}^{12}$, 18^3, 21^2, $\frac{45}{2}^4$, $\frac{165}{4}^4$, 66^1, ∞^{56}	0^{30}, 5^{15}, 6^8, 9^2, 12^{14}, $\frac{61}{4}^{24}$, 18^6, 21^4, $\frac{45}{2}^8$, 29^{186}, 33^2, $\frac{165}{4}^8$, 57^1, 66^2, ∞^{155}
90	0^5, 12^1	0^{30}, 6^3, 7^{18}, 8^3, 12^2, $\frac{27}{2}^6$, 16^6, $\frac{33}{2}^2$, 18^1, 19^6, $\frac{45}{2}^4$, 33^6, 42^2, 60^1, 69^2, ∞^{13}	0^6, 6^1, 7^6, 12^1, $\frac{27}{2}^6$, 16^6, $\frac{33}{2}^2$, 18^1, 19^6, $\frac{45}{2}^4$, 33^2, 42^2, 69^2, ∞^{60}	0^{31}, 6^4, 7^{24}, 8^3, 12^2, $\frac{27}{2}^{12}$, 16^{12}, $\frac{33}{2}^4$, 18^2, 19^{12}, $\frac{45}{2}^8$, 30^{199}, 33^8, 42^4, 60^1, 69^4, ∞^{166}
93	0^6, 3^1	0^{31}, 3^7, 7^3, 8^{18}, 9^3, 15^7, $\frac{69}{4}^4$, $\frac{39}{2}^4$, 20^9, 24^2, 33^2, 36^4, 48^1, 63^1, 69^2, ∞^{14}	0^7, 3^2, 8^6, 9^1, 15^7, $\frac{69}{4}^4$, $\frac{39}{2}^4$, 20^9, 24^2, 33^2, 48^1, 69^2, ∞^{65}	0^{32}, 3^8, 7^3, 8^{24}, 9^4, 15^{14}, $\frac{69}{4}^8$, $\frac{39}{2}^8$, 20^{18}, 24^4, 31^{213}, 33^4, 36^4, 48^2, 63^1, 69^4, ∞^{177}

96	$0^\mathbf{6}$, $\frac{9}{2}^\mathbf{2}$	$0^\mathbf{32}$, $\frac{9}{2}^\mathbf{14}$, $8^\mathbf{3}$, $9^\mathbf{6}$, $10^\mathbf{12}$, $\frac{33}{2}^\mathbf{6}$, $18^\mathbf{4}$, $20^\mathbf{3}$, $\frac{41}{2}^\mathbf{12}$, $21^\mathbf{2}$, $\frac{69}{2}^\mathbf{4}$, $36^\mathbf{2}$, $48^\mathbf{1}$, $66^\mathbf{2}$, $72^\mathbf{1}$, $\infty^\mathbf{15}$	$0^\mathbf{7}$, $\frac{9}{2}^\mathbf{4}$, $8^\mathbf{3}$, $9^\mathbf{2}$, $10^\mathbf{3}$, $\frac{33}{2}^\mathbf{6}$, $18^\mathbf{2}$, $20^\mathbf{3}$, $\frac{41}{2}^\mathbf{12}$, $21^\mathbf{2}$, $\frac{69}{2}^\mathbf{4}$, $48^\mathbf{1}$, $66^\mathbf{1}$, $72^\mathbf{1}$, $\infty^\mathbf{68}$	$0^\mathbf{33}$, $\frac{9}{2}^\mathbf{16}$, $8^\mathbf{6}$, $9^\mathbf{8}$, $10^\mathbf{15}$, $\frac{33}{2}^\mathbf{12}$, $18^\mathbf{6}$, $20^\mathbf{6}$, $\frac{41}{2}^\mathbf{24}$, $21^\mathbf{4}$, $32^\mathbf{228}$, $\frac{69}{2}^\mathbf{8}$, $36^\mathbf{2}$, $48^\mathbf{2}$, $66^\mathbf{3}$, $72^\mathbf{2}$, $\infty^\mathbf{186}$
99	$0^\mathbf{6}$, $6^\mathbf{1}$, $9^\mathbf{1}$	$0^\mathbf{33}$, $5^\mathbf{9}$, $6^\mathbf{7}$, $9^\mathbf{11}$, $11^\mathbf{9}$, $18^\mathbf{11}$, $21^\mathbf{3}$, $\frac{43}{2}^\mathbf{12}$, $22^\mathbf{3}$, $\frac{69}{2}^\mathbf{4}$, $39^\mathbf{2}$, $48^\mathbf{1}$, $57^\mathbf{2}$, $66^\mathbf{2}$, $72^\mathbf{1}$, $\infty^\mathbf{16}$	$0^\mathbf{7}$, $5^\mathbf{3}$, $6^\mathbf{2}$, $9^\mathbf{7}$, $11^\mathbf{3}$, $18^\mathbf{7}$, $21^\mathbf{3}$, $\frac{43}{2}^\mathbf{12}$, $22^\mathbf{3}$, $\frac{69}{2}^\mathbf{4}$, $48^\mathbf{1}$, $66^\mathbf{2}$, $72^\mathbf{1}$, $\infty^\mathbf{71}$	$0^\mathbf{34}$, $5^\mathbf{12}$, $6^\mathbf{8}$, $9^\mathbf{17}$, $11^\mathbf{12}$, $18^\mathbf{18}$, $21^\mathbf{6}$, $\frac{43}{2}^\mathbf{24}$, $22^\mathbf{6}$, $33^\mathbf{241}$, $\frac{69}{2}^\mathbf{8}$, $39^\mathbf{2}$, $48^\mathbf{2}$, $57^\mathbf{2}$, $66^\mathbf{4}$, $72^\mathbf{2}$, $\infty^\mathbf{197}$

Table 12: Slopes for $q = 4$, $i = 2$, type 2. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
0				
3				$0^{\mathbf{1}}$
6				$1^{\mathbf{3}}$
9		$0^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{2}}$, $2^{\mathbf{3}}$, $\infty^{\mathbf{1}}$
12		$\frac{3}{2}^{\mathbf{2}}$	$\frac{3}{2}^{\mathbf{2}}$	$\frac{3}{2}^{\mathbf{4}}$, $3^{\mathbf{4}}$, $\infty^{\mathbf{2}}$
15		$0^{\mathbf{2}}$, $3^{\mathbf{1}}$	$0^{\mathbf{1}}$, $3^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{3}}$, $3^{\mathbf{2}}$, $4^{\mathbf{6}}$, $\infty^{\mathbf{4}}$
18		$\frac{3}{2}^{\mathbf{2}}$, $3^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$\frac{3}{2}^{\mathbf{2}}$, $\infty^{\mathbf{2}}$	$\frac{3}{2}^{\mathbf{4}}$, $3^{\mathbf{1}}$, $5^{\mathbf{9}}$, $\infty^{\mathbf{7}}$
21		$0^{\mathbf{3}}$, $3^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $3^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{4}}$, $3^{\mathbf{2}}$, $6^{\mathbf{13}}$, $\infty^{\mathbf{9}}$
24		$1^{\mathbf{3}}$, $3^{\mathbf{2}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$1^{\mathbf{3}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$1^{\mathbf{6}}$, $3^{\mathbf{2}}$, $7^{\mathbf{15}}$, $15^{\mathbf{2}}$, $\infty^{\mathbf{11}}$
27		$0^{\mathbf{4}}$, $2^{\mathbf{3}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $2^{\mathbf{3}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{5}}$, $2^{\mathbf{6}}$, $8^{\mathbf{18}}$, $15^{\mathbf{2}}$, $\infty^{\mathbf{14}}$
30		$1^{\mathbf{3}}$, $\frac{3}{2}^{\mathbf{4}}$, $3^{\mathbf{2}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$1^{\mathbf{3}}$, $3^{\mathbf{1}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{6}}$	$1^{\mathbf{6}}$, $\frac{3}{2}^{\mathbf{4}}$, $3^{\mathbf{3}}$, $9^{\mathbf{22}}$, $15^{\mathbf{2}}$, $\infty^{\mathbf{18}}$
33		$0^{\mathbf{5}}$, $2^{\mathbf{3}}$, $3^{\mathbf{2}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $2^{\mathbf{3}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{8}}$	$0^{\mathbf{6}}$, $2^{\mathbf{6}}$, $3^{\mathbf{2}}$, $10^{\mathbf{27}}$, $15^{\mathbf{2}}$, $\infty^{\mathbf{23}}$
36		$\frac{3}{2}^{\mathbf{10}}$, $3^{\mathbf{1}}$, $\frac{15}{2}^{\mathbf{2}}$, $\infty^{\mathbf{2}}$	$\frac{3}{2}^{\mathbf{2}}$, $3^{\mathbf{1}}$, $\frac{15}{2}^{\mathbf{2}}$, $\infty^{\mathbf{10}}$	$\frac{3}{2}^{\mathbf{12}}$, $3^{\mathbf{2}}$, $\frac{15}{2}^{\mathbf{4}}$, $11^{\mathbf{33}}$, $\infty^{\mathbf{27}}$
39	$0^{\mathbf{1}}$	$0^{\mathbf{6}}$, $3^{\mathbf{5}}$, $\frac{33}{4}^{\mathbf{4}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{2}}$, $3^{\mathbf{1}}$, $\frac{33}{4}^{\mathbf{4}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{7}}$, $3^{\mathbf{6}}$, $\frac{33}{4}^{\mathbf{8}}$, $12^{\mathbf{40}}$, $\infty^{\mathbf{30}}$
42	$3^{\mathbf{1}}$	$1^{\mathbf{3}}$, $\frac{3}{2}^{\mathbf{6}}$, $3^{\mathbf{2}}$, $\frac{9}{2}^{\mathbf{2}}$, $\frac{15}{2}^{\mathbf{2}}$, $9^{\mathbf{2}}$, $27^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$\frac{3}{2}^{\mathbf{2}}$, $3^{\mathbf{1}}$, $\frac{9}{2}^{\mathbf{2}}$, $\frac{15}{2}^{\mathbf{2}}$, $9^{\mathbf{2}}$, $\infty^{\mathbf{12}}$	$1^{\mathbf{3}}$, $\frac{3}{2}^{\mathbf{8}}$, $3^{\mathbf{2}}$, $\frac{9}{2}^{\mathbf{4}}$, $\frac{15}{2}^{\mathbf{4}}$, $9^{\mathbf{4}}$, $13^{\mathbf{45}}$, $27^{\mathbf{1}}$, $\infty^{\mathbf{34}}$
45	$0^{\mathbf{1}}$	$0^{\mathbf{7}}$, $2^{\mathbf{3}}$, $3^{\mathbf{3}}$, $6^{\mathbf{3}}$, $\frac{33}{4}^{\mathbf{4}}$, $30^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{2}}$, $3^{\mathbf{1}}$, $6^{\mathbf{3}}$, $\frac{33}{4}^{\mathbf{4}}$, $\infty^{\mathbf{14}}$	$0^{\mathbf{8}}$, $2^{\mathbf{3}}$, $3^{\mathbf{4}}$, $6^{\mathbf{6}}$, $\frac{33}{4}^{\mathbf{8}}$, $14^{\mathbf{51}}$, $30^{\mathbf{1}}$, $\infty^{\mathbf{39}}$
48	$3^{\mathbf{1}}$	$1^{\mathbf{9}}$, $3^{\mathbf{5}}$, $\frac{15}{2}^{\mathbf{4}}$, $9^{\mathbf{3}}$, $27^{\mathbf{2}}$, $\infty^{\mathbf{4}}$	$1^{\mathbf{3}}$, $3^{\mathbf{1}}$, $\frac{15}{2}^{\mathbf{4}}$, $9^{\mathbf{3}}$, $\infty^{\mathbf{16}}$	$1^{\mathbf{12}}$, $3^{\mathbf{5}}$, $\frac{15}{2}^{\mathbf{8}}$, $9^{\mathbf{6}}$, $15^{\mathbf{58}}$, $27^{\mathbf{2}}$, $\infty^{\mathbf{45}}$
51	$0^{\mathbf{1}}$	$0^{\mathbf{8}}$, $2^{\mathbf{9}}$, $9^{\mathbf{6}}$, $15^{\mathbf{1}}$, $30^{\mathbf{2}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{2}}$, $2^{\mathbf{3}}$, $9^{\mathbf{6}}$, $15^{\mathbf{1}}$, $\infty^{\mathbf{18}}$	$0^{\mathbf{9}}$, $2^{\mathbf{12}}$, $9^{\mathbf{12}}$, $15^{\mathbf{2}}$, $16^{\mathbf{66}}$, $30^{\mathbf{2}}$, $\infty^{\mathbf{50}}$
54	$\frac{3}{2}^{\mathbf{2}}$	$1^{\mathbf{6}}$, $\frac{3}{2}^{\mathbf{8}}$, $3^{\mathbf{5}}$, $\frac{9}{2}^{\mathbf{2}}$, $\frac{21}{2}^{\mathbf{4}}$, $15^{\mathbf{3}}$, $27^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$1^{\mathbf{3}}$, $\frac{3}{2}^{\mathbf{2}}$, $3^{\mathbf{1}}$, $\frac{9}{2}^{\mathbf{2}}$, $\frac{21}{2}^{\mathbf{4}}$, $15^{\mathbf{2}}$, $\infty^{\mathbf{20}}$	$1^{\mathbf{9}}$, $\frac{3}{2}^{\mathbf{8}}$, $3^{\mathbf{6}}$, $\frac{9}{2}^{\mathbf{4}}$, $\frac{21}{2}^{\mathbf{8}}$, $15^{\mathbf{5}}$, $17^{\mathbf{75}}$, $27^{\mathbf{1}}$, $\infty^{\mathbf{55}}$
57	$0^{\mathbf{1}}$, $3^{\mathbf{1}}$	$0^{\mathbf{9}}$, $2^{\mathbf{6}}$, $3^{\mathbf{4}}$, $\frac{21}{4}^{\mathbf{4}}$, $12^{\mathbf{5}}$, $15^{\mathbf{4}}$, $30^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{2}}$, $2^{\mathbf{3}}$, $3^{\mathbf{1}}$, $\frac{21}{4}^{\mathbf{4}}$, $12^{\mathbf{5}}$, $15^{\mathbf{2}}$, $\infty^{\mathbf{21}}$	$0^{\mathbf{10}}$, $2^{\mathbf{9}}$, $3^{\mathbf{4}}$, $\frac{21}{4}^{\mathbf{8}}$, $12^{\mathbf{10}}$, $15^{\mathbf{6}}$, $18^{\mathbf{82}}$, $30^{\mathbf{1}}$, $\infty^{\mathbf{60}}$
60	$\frac{3}{2}^{\mathbf{2}}$	$\frac{3}{2}^{\mathbf{18}}$, $3^{\mathbf{5}}$, $6^{\mathbf{2}}$, $\frac{27}{2}^{\mathbf{6}}$, $15^{\mathbf{5}}$, $\infty^{\mathbf{6}}$	$\frac{3}{2}^{\mathbf{4}}$, $3^{\mathbf{4}}$, $6^{\mathbf{2}}$, $\frac{27}{2}^{\mathbf{6}}$, $15^{\mathbf{2}}$, $\infty^{\mathbf{24}}$	$\frac{3}{2}^{\mathbf{20}}$, $3^{\mathbf{9}}$, $6^{\mathbf{4}}$, $\frac{27}{2}^{\mathbf{12}}$, $15^{\mathbf{7}}$, $19^{\mathbf{90}}$, $\infty^{\mathbf{68}}$
63	$0^{\mathbf{1}}$, $3^{\mathbf{1}}$	$0^{\mathbf{10}}$, $3^{\mathbf{9}}$, $4^{\mathbf{6}}$, $9^{\mathbf{1}}$, $15^{\mathbf{13}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{2}}$, $3^{\mathbf{2}}$, $4^{\mathbf{6}}$, $9^{\mathbf{1}}$, $15^{\mathbf{9}}$, $\infty^{\mathbf{26}}$	$0^{\mathbf{11}}$, $3^{\mathbf{10}}$, $4^{\mathbf{12}}$, $9^{\mathbf{2}}$, $15^{\mathbf{22}}$, $20^{\mathbf{99}}$, $\infty^{\mathbf{75}}$

66	$3^1, 15^1$	1^6, $\frac{3}{2}^{10}$, 3^3, 5^6, $\frac{15}{2}^2$, 9^1, 15^9, $\frac{33}{2}^6$, ∞^7	$\frac{3}{2}^2$, 3^1, 5^6, $\frac{15}{2}^2$, 9^1, 15^3, $\frac{33}{2}^6$, ∞^{29}	1^6, $\frac{3}{2}^{12}$, 3^3, 5^{12}, $\frac{15}{2}^4$, 9^2, 15^{11}, $\frac{33}{2}^{12}$, 21^{109}, ∞^{82}
69	$0^2, 15^1$	0^{11}, 2^6, 3^5, 6^8, $\frac{33}{4}^4$, 15^8, 18^5, ∞^8	0^3, 3^1, 6^7, $\frac{33}{4}^4$, 15^3, 18^5, ∞^{32}	0^{12}, 2^6, 3^6, 6^{15}, $\frac{33}{4}^8$, 15^{10}, 18^{10}, 22^{120}, ∞^{89}
72	$3^2, 15^1$	1^{15}, 3^8, 7^9, $\frac{15}{2}^2$, 9^3, 15^7, $\frac{39}{2}^4$, 27^2, 33^1, 63^1, ∞^8	1^3, 3^2, 7^9, $\frac{15}{2}^2$, 9^2, 15^3, $\frac{39}{2}^4$, 33^1, 63^1, ∞^{33}	1^{18}, 3^8, 7^{18}, $\frac{15}{2}^4$, 9^5, 15^9, $\frac{39}{2}^8$, 23^{129}, 27^2, 33^2, 63^2, ∞^{95}
75	$0^2, 15^1$	0^{12}, 2^{15}, 8^9, 9^2, $\frac{39}{4}^4$, 12^1, 15^5, 21^3, 30^2, 33^1, 36^1, 63^1, ∞^9	0^3, 2^3, 8^9, 9^2, $\frac{39}{4}^4$, 15^2, 21^3, 33^1, 36^1, 63^1, ∞^{36}	0^{13}, 2^{18}, 8^{18}, 9^4, $\frac{39}{4}^8$, 12^1, 15^6, 21^6, 24^{139}, 30^2, 33^2, 36^2, 63^2, ∞^{104}
78	$\frac{3}{2}^2, 3^1$	1^9, $\frac{3}{2}^{12}$, 3^8, $\frac{15}{2}^6$, 9^7, $\frac{21}{2}^6$, 15^1, $\frac{33}{2}^2$, $\frac{45}{2}^4$, 27^2, $\frac{69}{2}^2$, 63^1, ∞^{10}	1^3, $\frac{3}{2}^2$, 3^2, $\frac{15}{2}^2$, 9^7, $\frac{21}{2}^6$, $\frac{33}{2}^2$, $\frac{45}{2}^4$, $\frac{69}{2}^2$, 63^1, ∞^{39}	1^{12}, $\frac{3}{2}^{12}$, 3^9, $\frac{15}{2}^8$, 9^{14}, $\frac{21}{2}^{12}$, 15^1, $\frac{33}{2}^4$, $\frac{45}{2}^8$, 25^{150}, 27^2, $\frac{69}{2}^4$, 63^2, ∞^{113}
81	$0^2, 3^1$	0^{13}, 2^9, 3^6, $\frac{33}{4}^8$, 9^2, 10^6, $\frac{45}{4}^4$, 12^2, 15^1, $\frac{69}{4}^4$, 18^1, 24^3, 30^2, 36^1, 39^1, 63^1, ∞^{11}	0^3, 2^3, 3^1, 9^2, 10^6, $\frac{45}{4}^4$, 12^2, 15^1, $\frac{69}{4}^4$, 24^3, 36^1, 39^1, 63^1, ∞^{43}	0^{14}, 2^{12}, 3^6, $\frac{33}{4}^8$, 9^4, 10^{12}, $\frac{45}{4}^8$, 12^4, 15^2, $\frac{69}{4}^8$, 18^1, 24^6, 26^{162}, 30^2, 36^2, 39^2, 63^2, ∞^{123}
84	$\frac{3}{2}^4$	$\frac{3}{2}^{26}$, 3^3, 5^3, $\frac{15}{2}^4$, 9^6, 11^3, 12^6, $\frac{27}{2}^2$, 15^6, 18^2, $\frac{39}{2}^2$, 21^1, $\frac{51}{2}^2$, 33^1, 39^1, 63^1, ∞^{12}	$\frac{3}{2}^6$, 3^1, 5^3, 11^3, 12^6, $\frac{27}{2}^2$, 15^4, 18^2, $\frac{39}{2}^2$, $\frac{51}{2}^2$, 33^1, 39^1, 63^1, ∞^{47}	$\frac{3}{2}^{28}$, 3^4, 5^6, $\frac{15}{2}^4$, 9^6, 11^6, 12^{12}, $\frac{27}{2}^4$, 15^{10}, 18^4, $\frac{39}{2}^4$, 21^1, $\frac{51}{2}^4$, 27^{175}, 33^2, 39^2, 63^2, ∞^{132}
87	$0^2, 3^2$	0^{14}, 3^{13}, 6^6, $\frac{33}{4}^8$, 9^2, 12^1, $\frac{51}{4}^4$, 14^6, 15^5, 17^3, $\frac{81}{4}^4$, 21^2, 24^1, 27^1, 33^1, 42^2, 63^2, ∞^{12}	0^3, 3^3, 6^6, 12^1, $\frac{51}{4}^4$, 14^6, 15^1, 17^3, $\frac{81}{4}^4$, 21^2, 27^1, 33^1, 42^2, 63^2, ∞^{48}	0^{15}, 3^{14}, 6^{12}, $\frac{33}{4}^8$, 9^2, 12^2, $\frac{51}{4}^8$, 14^{12}, 15^6, 17^6, $\frac{81}{4}^8$, 21^4, 24^1, 27^2, 28^{186}, 33^2, 42^4, 63^4, ∞^{139}
90	$\frac{3}{2}^2, 3^1, 15^1$	1^9, $\frac{3}{2}^{14}$, 3^4, $\frac{9}{2}^6$, 5^3, 7^3, 9^4, $\frac{27}{2}^2$, 15^{10}, $\frac{31}{2}^6$, $\frac{33}{2}^2$, 17^6, 21^4, 27^1, 36^2, $\frac{87}{2}^2$, 63^2, ∞^{13}	$\frac{3}{2}^4$, 3^1, $\frac{9}{2}^2$, 5^3, 7^3, $\frac{27}{2}^2$, 15^2, $\frac{31}{2}^6$, $\frac{33}{2}^2$, 17^6, 21^4, 36^2, $\frac{87}{2}^2$, 63^2, ∞^{52}	1^9, $\frac{3}{2}^{16}$, 3^4, $\frac{9}{2}^8$, 5^6, 7^6, 9^4, $\frac{27}{2}^4$, 15^{11}, $\frac{31}{2}^{12}$, $\frac{33}{2}^4$, 17^{12}, 21^8, 27^1, 29^{198}, 36^4, $\frac{87}{2}^4$, 63^4, ∞^{150}
93	$0^2, 3^1, 15^1$	0^{15}, 2^9, 3^7, 6^{15}, 15^{11}, 16^6, 18^4, 19^6, $\frac{81}{4}^4$, 24^2, 36^2, 42^2, 63^2, ∞^{14}	0^3, 3^2, 6^9, 15^2, 16^6, 18^3, 19^6, $\frac{81}{4}^4$, 24^2, 36^2, 42^2, 63^2, ∞^{56}	0^{16}, 2^9, 3^8, 6^{24}, 15^{12}, 16^{12}, 18^7, 19^{12}, $\frac{81}{4}^8$, 24^4, 30^{211}, 36^4, 42^4, 63^4, ∞^{161}

| 96 | 3^2, 15^2 | 1^{21}, 3^{11}, 6^4, 7^3, $\frac{15}{2}^6$, 9^3, 15^{14}, $\frac{35}{2}^6$, 18^4, 19^3, $\frac{39}{2}^4$, 21^4, 24^2, 39^1, $\frac{87}{2}^2$, 63^2, ∞^{15} | 1^3, 3^2, 6^4, 7^3, $\frac{15}{2}^2$, 15^2, $\frac{35}{2}^6$, 18^4, 19^3, $\frac{39}{2}^4$, 21^4, 24^2, 39^1, $\frac{87}{2}^2$, 63^2, ∞^{61} | 1^{24}, 3^{11}, 6^8, 7^6, $\frac{15}{2}^8$, 9^3, 15^{14}, $\frac{35}{2}^{12}$, 18^8, 19^6, $\frac{39}{2}^8$, 21^8, 24^4, 31^{225}, 39^2, $\frac{87}{2}^4$, 63^4, ∞^{173} |
| 99 | 0^3, 15^2 | 0^{16}, 2^{21}, $\frac{15}{2}^4$, 9^{13}, 10^3, 15^{12}, 18^2, $\frac{39}{2}^4$, 20^3, $\frac{81}{4}^4$, 21^6, $\frac{93}{4}^4$, 39^1, 48^1, 63^2, ∞^{16} | 0^4, 2^3, $\frac{15}{2}^4$, 9^3, 10^3, 15^2, 18^2, $\frac{39}{2}^4$, 20^3, $\frac{81}{4}^4$, 21^6, $\frac{93}{4}^4$, 39^1, 48^1, 63^2, ∞^{66} | 0^{17}, 2^{24}, $\frac{15}{2}^8$, 9^{16}, 10^6, 15^{12}, 18^4, $\frac{39}{2}^8$, 20^6, $\frac{81}{4}^8$, 21^{12}, $\frac{93}{4}^8$, 32^{240}, 39^2, 48^2, 63^4, ∞^{184} |

4 $q = 5$.

4.1 $i = 1$.

Table 13: Slopes for $q = 5$, $i = 1$, type 0. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
1				
5				
9				$0^{\mathbf{1}}$
13				$\frac{8}{3}^{\mathbf{3}}$
17				$\frac{16}{3}^{\mathbf{6}}$
21				$8^{\mathbf{10}}$
25		$\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\frac{32}{3}^{\mathbf{12}}$, $\infty^{\mathbf{2}}$
29		$\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $8^{\mathbf{1}}$	$0^{\mathbf{1}}$, $8^{\mathbf{1}}$, $\frac{40}{3}^{\mathbf{15}}$, $\infty^{\mathbf{4}}$
33		$\infty^{\mathbf{3}}$	$4^{\mathbf{2}}$, $16^{\mathbf{1}}$	$4^{\mathbf{2}}$, $16^{\mathbf{20}}$, $\infty^{\mathbf{6}}$
37		$\infty^{\mathbf{4}}$	$8^{\mathbf{3}}$, $24^{\mathbf{1}}$	$8^{\mathbf{3}}$, $\frac{56}{3}^{\mathbf{24}}$, $24^{\mathbf{1}}$, $\infty^{\mathbf{8}}$
41		$16^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$12^{\mathbf{4}}$, $16^{\mathbf{1}}$	$12^{\mathbf{4}}$, $16^{\mathbf{2}}$, $\frac{64}{3}^{\mathbf{30}}$, $\infty^{\mathbf{9}}$
45		$18^{\mathbf{2}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $16^{\mathbf{3}}$, $18^{\mathbf{2}}$	$0^{\mathbf{1}}$, $16^{\mathbf{3}}$, $18^{\mathbf{4}}$, $24^{\mathbf{37}}$, $\infty^{\mathbf{10}}$
49		$20^{\mathbf{1}}$, $24^{\mathbf{1}}$, $\infty^{\mathbf{6}}$	$0^{\mathbf{1}}$, $4^{\mathbf{2}}$, $20^{\mathbf{3}}$, $24^{\mathbf{1}}$, $48^{\mathbf{1}}$	$0^{\mathbf{1}}$, $4^{\mathbf{2}}$, $20^{\mathbf{4}}$, $24^{\mathbf{2}}$, $\frac{80}{3}^{\mathbf{42}}$, $48^{\mathbf{1}}$, $\infty^{\mathbf{14}}$
53		$24^{\mathbf{1}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{8}}$	$\frac{8}{3}^{\mathbf{3}}$, $8^{\mathbf{1}}$, $16^{\mathbf{1}}$, $24^{\mathbf{2}}$, $28^{\mathbf{1}}$, $48^{\mathbf{1}}$, $56^{\mathbf{1}}$	$\frac{8}{3}^{\mathbf{3}}$, $8^{\mathbf{1}}$, $16^{\mathbf{1}}$, $24^{\mathbf{3}}$, $28^{\mathbf{2}}$, $\frac{88}{3}^{\mathbf{48}}$, $48^{\mathbf{1}}$, $56^{\mathbf{1}}$, $\infty^{\mathbf{18}}$
57		$28^{\mathbf{1}}$, $32^{\mathbf{1}}$, $\infty^{\mathbf{10}}$	$\frac{16}{3}^{\mathbf{3}}$, $8^{\mathbf{2}}$, $16^{\mathbf{1}}$, $24^{\mathbf{1}}$, $28^{\mathbf{1}}$, $32^{\mathbf{1}}$, $48^{\mathbf{1}}$, $56^{\mathbf{1}}$, $64^{\mathbf{1}}$	$\frac{16}{3}^{\mathbf{3}}$, $8^{\mathbf{2}}$, $16^{\mathbf{1}}$, $24^{\mathbf{1}}$, $28^{\mathbf{2}}$, $32^{\mathbf{57}}$, $48^{\mathbf{1}}$, $56^{\mathbf{1}}$, $64^{\mathbf{1}}$, $\infty^{\mathbf{22}}$
61		$26^{\mathbf{2}}$, $32^{\mathbf{1}}$, $\infty^{\mathbf{11}}$	$8^{\mathbf{1}}$, $10^{\mathbf{4}}$, $12^{\mathbf{2}}$, $24^{\mathbf{1}}$, $26^{\mathbf{2}}$, $32^{\mathbf{1}}$, $52^{\mathbf{2}}$, $64^{\mathbf{1}}$	$8^{\mathbf{1}}$, $10^{\mathbf{4}}$, $12^{\mathbf{2}}$, $24^{\mathbf{1}}$, $26^{\mathbf{4}}$, $32^{\mathbf{2}}$, $\frac{104}{3}^{\mathbf{63}}$, $52^{\mathbf{2}}$, $64^{\mathbf{1}}$, $\infty^{\mathbf{25}}$
65		$28^{\mathbf{4}}$, $40^{\mathbf{1}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{1}}$, $12^{\mathbf{2}}$, $14^{\mathbf{4}}$, $16^{\mathbf{1}}$, $28^{\mathbf{4}}$, $40^{\mathbf{1}}$, $56^{\mathbf{3}}$	$0^{\mathbf{1}}$, $12^{\mathbf{2}}$, $14^{\mathbf{4}}$, $16^{\mathbf{1}}$, $28^{\mathbf{8}}$, $\frac{112}{3}^{\mathbf{72}}$, $40^{\mathbf{2}}$, $56^{\mathbf{3}}$, $\infty^{\mathbf{27}}$
69		$30^{\mathbf{2}}$, $32^{\mathbf{4}}$, $40^{\mathbf{1}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{1}}$, $4^{\mathbf{2}}$, $16^{\mathbf{3}}$, $20^{\mathbf{2}}$, $30^{\mathbf{2}}$, $32^{\mathbf{4}}$, $40^{\mathbf{1}}$, $48^{\mathbf{1}}$, $60^{\mathbf{2}}$	$0^{\mathbf{1}}$, $4^{\mathbf{2}}$, $16^{\mathbf{3}}$, $20^{\mathbf{2}}$, $30^{\mathbf{4}}$, $32^{\mathbf{8}}$, $40^{\mathbf{84}}$, $48^{\mathbf{1}}$, $60^{\mathbf{2}}$, $\infty^{\mathbf{29}}$
73		$33^{\mathbf{4}}$, $38^{\mathbf{2}}$, $48^{\mathbf{1}}$, $\infty^{\mathbf{14}}$	$\frac{8}{3}^{\mathbf{3}}$, $8^{\mathbf{3}}$, $20^{\mathbf{2}}$, $24^{\mathbf{1}}$, $33^{\mathbf{4}}$, $38^{\mathbf{2}}$, $48^{\mathbf{3}}$, $64^{\mathbf{1}}$, $76^{\mathbf{2}}$	$\frac{8}{3}^{\mathbf{3}}$, $8^{\mathbf{3}}$, $20^{\mathbf{2}}$, $24^{\mathbf{1}}$, $33^{\mathbf{8}}$, $38^{\mathbf{4}}$, $\frac{128}{3}^{\mathbf{90}}$, $48^{\mathbf{4}}$, $64^{\mathbf{1}}$, $76^{\mathbf{2}}$, $\infty^{\mathbf{35}}$

77		36^2, 38^2, 42^2, 52^1, ∞^{17}	$\frac{16}{3}^6$, 12^2, 24^2, 36^2, 38^2, 42^2, 48^2, 52^1, 56^1, 76^2, 84^2	$\frac{16}{3}^6$, 12^2, 24^2, 36^4, 38^4, 42^4, $\frac{136}{3}^{99}$, 48^2, 52^2, 56^1, 76^2, 84^2, ∞^{41}
81		36^3, 40^2, 42^2, 56^1, ∞^{19}	8^7, 12^2, 16^1, 24^1, 36^3, 40^2, 42^2, 48^1, 56^3, 64^1, 72^2, 84^2	8^7, 12^2, 16^1, 24^1, 36^6, 40^4, 42^4, 48^{110}, 56^4, 64^1, 72^2, 84^2, ∞^{46}
85		38^6, 40^1, 44^2, 60^1, ∞^{20}	0^1, $\frac{32}{3}^6$, 14^4, 24^1, 38^6, 40^1, 44^2, 52^2, 60^3, 76^2, 80^2	0^1, $\frac{32}{3}^6$, 14^4, 24^1, 38^{12}, 40^2, 44^4, $\frac{152}{3}^{120}$, 52^2, 60^4, 76^2, 80^2, ∞^{50}
89		40^3, 41^4, 42^4, 60^1, 64^1, ∞^{20}	0^1, 4^2, $\frac{40}{3}^3$, 16^6, 40^3, 41^4, 42^4, 48^1, 56^3, 60^1, 64^1, 80^4	0^1, 4^2, $\frac{40}{3}^3$, 16^6, 40^6, 41^8, 42^8, 48^1, $\frac{160}{3}^{132}$, 56^3, 60^2, 64^2, 80^4, ∞^{53}
93		$\frac{128}{3}^3$, 43^4, 44^2, 45^4, 48^1, 64^1, 68^1, ∞^{20}	$\frac{8}{3}^3$, 8^3, 16^1, 18^4, 24^1, $\frac{128}{3}^3$, 43^4, 44^2, 45^4, 48^3, 56^1, 60^2, 64^1, 68^1, 84^2, 96^1	$\frac{8}{3}^3$, 8^3, 16^1, 18^4, 24^1, $\frac{128}{3}^6$, 43^8, 44^4, 45^8, 48^4, 56^{146}, 60^2, 64^2, 68^2, 84^2, 96^1, ∞^{56}
97		$\frac{136}{3}^3$, 46^6, 48^1, 52^4, 72^2, ∞^{24}	$\frac{16}{3}^6$, 12^4, 20^2, 24^1, $\frac{136}{3}^3$, 46^6, 48^3, 52^6, 56^1, 64^1, 72^2, 96^2, 104^3	$\frac{16}{3}^6$, 12^4, 20^2, 24^1, $\frac{136}{3}^6$, 46^{12}, 48^4, 52^{10}, 56^1, $\frac{176}{3}^{156}$, 64^1, 72^4, 96^2, 104^3, ∞^{64}
101		46^4, 48^1, 49^4, 50^2, 52^3, 56^1, 76^2, ∞^{27}	8^{10}, 16^3, 24^1, 46^4, 48^2, 49^4, 50^2, 52^7, 56^2, 64^1, 76^2, 96^2, 104^4	8^{10}, 16^3, 24^1, 46^8, 48^3, 49^8, 50^4, 52^{10}, 56^3, $\frac{184}{3}^{168}$, 64^1, 76^4, 96^2, 104^4, ∞^{71}
105		48^8, 50^2, 52^3, 54^4, 80^2, ∞^{29}	0^1, $\frac{32}{3}^{12}$, 20^2, 48^8, 50^2, $\frac{152}{3}^3$, 52^3, 54^4, 56^2, 60^2, 64^1, 80^2, 96^2, 100^2, 104^2	0^1, $\frac{32}{3}^{12}$, 20^2, 48^{16}, 50^4, $\frac{152}{3}^3$, 52^6, 54^8, 56^2, 60^2, 64^{182}, 80^4, 96^2, 100^2, 104^2, ∞^{77}
109		50^4, 51^8, 52^2, 54^2, 56^3, 64^1, 76^1, 84^1, ∞^{30}	0^1, 4^2, $\frac{40}{3}^{12}$, 24^1, 48^1, 50^4, 51^8, 52^2, $\frac{160}{3}^3$, 54^2, 56^5, 64^3, 76^1, 84^1, 96^1, 100^4, 104^1	0^1, 4^2, $\frac{40}{3}^{12}$, 24^1, 48^1, 50^8, 51^{16}, 52^4, $\frac{160}{3}^3$, 54^4, 56^8, 64^4, $\frac{200}{3}^{195}$, 76^2, 84^2, 96^1, 100^4, 104^1, ∞^{82}
113		$\frac{158}{3}^6$, 53^4, 54^4, 55^8, 64^1, 84^1, 88^2, ∞^{30}	$\frac{8}{3}^3$, 8^3, 16^{10}, 48^2, $\frac{158}{3}^6$, 53^4, 54^4, 55^8, 56^2, 58^4, 64^1, 84^1, 88^2, 96^1, 100^2, 104^3	$\frac{8}{3}^3$, 8^3, 16^{10}, 48^2, $\frac{158}{3}^{12}$, 53^8, 54^8, 55^{16}, 56^2, 58^4, 64^2, $\frac{208}{3}^{210}$, 84^2, 88^4, 96^1, 100^2, 104^3, ∞^{86}

117		$\frac{166}{3}^6$, 56^{10}, 58^8, 62^2, 68^1, 88^1, 92^2, ∞^{30}	$\frac{16}{3}^6$, 12^4, $\frac{56}{3}^6$, 48^2, 52^2, $\frac{166}{3}^6$, 56^{11}, 58^8, 60^2, 62^2, 64^2, 68^1, 88^1, 92^2, 96^2, 104^1, 124^2	$\frac{16}{3}^6$, 12^4, $\frac{56}{3}^6$, 48^2, 52^2, $\frac{166}{3}^{12}$, 56^{21}, 58^{16}, 60^2, 62^4, 64^2, 68^2, 72^{226}, 88^2, 92^4, 96^2, 104^1, 124^2, ∞^{90}
121	16^1	16^1, 56^3, 58^2, $\frac{117}{2}^8$, 59^8, 62^2, 66^2, 76^1, 96^3, ∞^{35}	8^{10}, 16^5, $\frac{64}{3}^3$, 48^1, 52^4, 56^6, 58^2, $\frac{117}{2}^8$, 59^8, 62^2, 64^2, 66^2, 76^1, 96^6, 124^4, ∞^1	8^{10}, 16^5, $\frac{64}{3}^3$, 48^1, 52^4, 56^9, 58^4, $\frac{117}{2}^{16}$, 59^{16}, 62^4, 64^2, 66^4, $\frac{224}{3}^{243}$, 76^2, 96^9, 124^4, ∞^{99}
125	20^1	20^1, 58^8, 60^3, 61^4, 62^8, 64^4, 80^1, 100^2, ∞^{39}	0^1, $\frac{32}{3}^{12}$, 20^6, 24^1, $\frac{152}{3}^3$, 56^6, 58^8, 60^5, 61^4, 62^8, 64^4, 80^1, 96^3, 100^2, 104^1, 124^4, ∞^1	0^1, $\frac{32}{3}^{12}$, 20^6, 24^1, $\frac{152}{3}^3$, 56^6, 58^{16}, 60^8, 61^8, 62^{16}, 64^8, $\frac{232}{3}^{258}$, 80^2, 96^3, 100^4, 104^1, 124^4, ∞^{108}
129	24^1	24^1, 60^5, 61^{12}, 62^2, 64^3, 65^4, 66^4, 84^1, 104^1, ∞^{42}	0^1, 8^1, $\frac{40}{3}^{15}$, 24^5, 48^1, $\frac{160}{3}^6$, 60^9, 61^{12}, 62^2, 64^4, 65^4, 66^4, 84^1, 96^2, 104^3, 120^2, 124^2, ∞^1	0^1, 8^1, $\frac{40}{3}^{15}$, 24^5, 48^1, $\frac{160}{3}^6$, 60^{14}, 61^{24}, 62^4, 64^7, 65^8, 66^8, 80^{274}, 84^2, 96^2, 104^4, 120^2, 124^2, ∞^{116}

Table 14: Slopes for $q = 5$, $i = 1$, type 1. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
0				0^1
4		∞^1	0^1	$0^1, \infty^2$
8		$4^1, \infty^1$	$0^1, 4^1$	$0^1, 4^2, \infty^3$
12		$6^2, \infty^1$	$0^1, 6^2$	$0^1, 6^4, 8^1, \infty^4$
16		$8^3, \infty^1$	$0^1, 8^3$	$0^1, 8^6, \frac{32}{3}^3, \infty^5$
20		$10^4, \infty^1$	$0^1, 10^4$	$0^1, 10^8, \frac{40}{3}^6, \infty^6$
24		$12^5, \infty^1$	$0^1, 12^5$	$0^1, 12^{10}, 16^{10}, \infty^7$
28	4^1	$4^1, 14^4, \infty^3$	$0^1, 4^2, 14^4, \infty^1$	$0^1, 4^2, 14^8, \frac{56}{3}^{15}, \infty^{10}$
32	8^1	$8^1, 16^5, \infty^4$	$0^1, 8^3, 16^5, \infty^1$	$0^1, 8^3, 16^{10}, \frac{64}{3}^{18}, \infty^{13}$
36	12^1	$12^1, 18^6, \infty^5$	$0^1, 12^4, 18^6, \infty^1$	$0^1, 12^4, 18^{12}, 24^{22}, \infty^{16}$
40	16^1	$16^1, 20^7, \infty^6$	$0^1, 16^5, 20^7, \infty^1$	$0^1, 16^5, 20^{14}, \frac{80}{3}^{27}, \infty^{19}$
44	20^1	$20^1, 22^8, \infty^7$	$0^1, 20^6, 22^8, \infty^1$	$0^1, 20^6, 22^{16}, \frac{88}{3}^{33}, \infty^{22}$
48	4^1	$4^1, 24^9, \infty^8$	$0^1, 4^2, 24^{14}, \infty^1$	$0^1, 4^2, 24^{23}, 32^{40}, \infty^{25}$
52	6^2	$6^2, 26^8, 28^1, \infty^{10}$	$0^1, 6^4, 8^1, 26^8, 28^5, \infty^2$	$0^1, 6^4, 8^1, 26^{16}, 28^6, \frac{104}{3}^{48}, \infty^{29}$
56	$8^1, 12^1$	$8^1, 12^1, 28^9, 32^1, \infty^{12}$	$0^1, 8^2, \frac{32}{3}^3, 12^2, 28^9, 32^4, 56^1, \infty^2$	$0^1, 8^2, \frac{32}{3}^3, 12^2, 28^{18}, 32^5, \frac{112}{3}^{54}, 56^1, \infty^{34}$
60	$12^1, 16^1$	$12^1, 16^1, 30^{10}, 36^1, \infty^{14}$	$0^1, 12^2, \frac{40}{3}^3, 16^4, 30^{10}, 36^3, 56^1, 64^1, \infty^2$	$0^1, 12^2, \frac{40}{3}^3, 16^4, 30^{20}, 36^4, 40^{61}, 56^1, 64^1, \infty^{39}$
64	$16^1, 20^1$	$16^1, 20^1, 32^{11}, 40^1, \infty^{16}$	$0^1, 16^3, 18^4, 20^4, 32^{11}, 40^2, 60^2, 72^1, \infty^2$	$0^1, 16^3, 18^4, 20^4, 32^{22}, 40^3, \frac{128}{3}^{69}, 60^2, 72^1, \infty^{44}$
68	$4^1, 20^1$	$4^1, 20^1, 34^{12}, 44^1, \infty^{18}$	$0^1, 4^2, 20^4, 22^4, 24^3, 34^{12}, 44^1, 64^3, 80^1, \infty^2$	$0^1, 4^2, 20^4, 22^4, 24^3, 34^{24}, 44^2, \frac{136}{3}^{78}, 64^3, 80^1, \infty^{49}$
72	6^2	$6^2, 36^{13}, 38^2, \infty^{19}$	$0^1, 6^4, 8^1, 24^3, 26^4, 28^2, 36^{13}, 38^2, 68^4, \infty^2$	$0^1, 6^4, 8^1, 24^3, 26^4, 28^2, 36^{26}, 38^4, 48^{88}, 68^4, \infty^{53}$
76	8^3	$8^3, 38^{12}, 41^4, \infty^{21}$	$0^1, 8^6, \frac{32}{3}^3, 28^4, 32^3, 38^{12}, 41^4, 56^1, 72^3, \infty^3$	$0^1, 8^6, \frac{32}{3}^3, 28^4, 32^3, 38^{24}, 41^8, \frac{152}{3}^{99}, 56^1, 72^3, \infty^{58}$

80	$10^2, 16^1$	$10^2, 16^1, 40^{13}, 44^2, 46^2, \infty^{24}$	$0^1, 10^4, \frac{40}{3}^6, 16^2, 32^3, 36^2, 40^{13}, 44^2, 46^2, 56^2, 76^2, 84^2, \infty^3$	$0^1, 10^4, \frac{40}{3}^6, 16^2, 32^3, 36^2, 40^{26}, 44^4, 46^4, \frac{160}{3}^{108}, 56^2, 76^2, 84^2, \infty^{65}$
84	$12^1, 16^1, 20^1$	$12^1, 16^1, 20^1, 42^{14}, 48^2, 50^2, \infty^{27}$	$0^1, 12^2, 16^9, 20^4, 36^2, 40^1, 42^{14}, 48^2, 50^2, 56^1, 64^1, 72^1, 76^2, 80^1, 92^2, \infty^3$	$0^1, 12^2, 16^9, 20^4, 36^2, 40^1, 42^{28}, 48^4, 50^4, 56^{119}, 64^1, 72^1, 76^2, 80^1, 92^2, \infty^{72}$
88	$4^1, 16^1, 20^1$	$4^1, 16^1, 20^1, 44^{15}, 52^2, 54^2, \infty^{30}$	$0^1, 4^2, 16^2, \frac{56}{3}^6, 20^2, 22^4, 24^4, 40^1, 44^{15}, 52^2, 54^2, 60^2, 68^2, 84^2, 88^2, 100^2, \infty^3$	$0^1, 4^2, 16^2, \frac{56}{3}^6, 20^2, 22^4, 24^4, 40^1, 44^{30}, 52^4, 54^4, \frac{176}{3}^{129}, 60^2, 68^2, 84^2, 88^2, 100^2, \infty^{79}$
92	$6^2, 20^1$	$6^2, 20^1, 46^{16}, 48^3, 56^2, \infty^{32}$	$0^1, 6^4, 8^1, 20^2, \frac{64}{3}^3, 24^6, 26^4, 46^{16}, 48^3, 56^2, 64^3, 72^2, 88^4, 96^2, \infty^3$	$0^1, 6^4, 8^1, 20^2, \frac{64}{3}^3, 24^6, 26^4, 46^{32}, 48^6, 56^4, \frac{184}{3}^{141}, 64^3, 72^2, 88^4, 96^2, \infty^{85}$
96	8^3	$8^3, 48^{17}, \frac{152}{3}^3, 51^4, \infty^{33}$	$0^1, 8^6, \frac{32}{3}^3, 24^1, 26^4, 28^6, 32^1, 48^{17}, \frac{152}{3}^3, 51^4, 56^1, 68^4, 92^6, \infty^3$	$0^1, 8^6, \frac{32}{3}^3, 24^1, 26^4, 28^6, 32^1, 48^{34}, \frac{152}{3}^6, 51^8, 56^1, 64^{154}, 68^4, 92^6, \infty^{90}$
100	10^4	$10^4, 50^{16}, \frac{160}{3}^3, 54^6, 56^1, \infty^{35}$	$0^1, 10^8, \frac{40}{3}^6, 28^2, 30^4, 32^1, 36^2, 50^{16}, \frac{160}{3}^3, 54^6, 56^3, 64^1, 72^3, 96^4, 104^1, \infty^4$	$0^1, 10^8, \frac{40}{3}^6, 28^2, 30^4, 32^1, 36^2, 50^{32}, \frac{160}{3}^6, 54^{12}, 56^4, 64^1, \frac{200}{3}^{168}, 72^3, 96^4, 104^1, \infty^{96}$
104	$12^3, 20^1$	$12^3, 20^1, 52^{17}, 56^1, 57^4, 58^2, 60^3, \infty^{39}$	$0^1, 12^6, 16^{10}, 20^2, 32^3, 36^2, 40^1, 52^{17}, 56^2, 57^4, 58^2, 60^7, 76^2, 100^2, 104^2, 112^3, \infty^4$	$0^1, 12^6, 16^{10}, 20^2, 32^3, 36^2, 40^1, 52^{34}, 56^3, 57^8, 58^4, 60^{10}, \frac{208}{3}^{180}, 76^2, 100^2, 104^2, 112^3, \infty^{105}$
108	$4^1, 14^2, 20^1$	$4^1, 14^2, 20^1, 54^{18}, 60^3, 62^4, 64^3, \infty^{43}$	$0^1, 4^2, 14^4, \frac{56}{3}^{12}, 20^2, 24^2, 36^2, 40^1, 54^{18}, \frac{176}{3}^3, 60^3, 62^4, 64^5, 68^2, 80^1, 104^2, 108^2, 112^2, 120^3, \infty^4$	$0^1, 4^2, 14^4, \frac{56}{3}^{12}, 20^2, 24^2, 36^2, 40^1, 54^{36}, \frac{176}{3}^3, 60^6, 62^8, 64^8, 68^2, 72^{193}, 80^1, 104^2, 108^2, 112^2, 120^3, \infty^{114}$
112	$6^2, 16^1, 20^1$	$6^2, 16^1, 20^1, 56^{19}, 58^4, 64^3, 66^4, \infty^{46}$	$0^1, 6^4, 8^1, 16^2, 20^2, \frac{64}{3}^{12}, 26^4, 40^1, 56^{19}, 58^4, \frac{184}{3}^3, 64^5, 66^4, 72^4, 104^1, 108^4, 112^1, 116^2, 120^2, \infty^4$	$0^1, 6^4, 8^1, 16^2, 20^2, \frac{64}{3}^{12}, 26^4, 40^1, 56^{38}, 58^8, \frac{184}{3}^3, 64^8, 66^8, 72^4, \frac{224}{3}^{207}, 104^1, 108^4, 112^1, 116^2, 120^2, \infty^{122}$

116	$8^3, 20^1$	$8^3, 20^1, 58^{20}, \frac{182}{3}^6,$ $61^4, 68^3, \infty^{48}$	$0^1, 8^6, \frac{32}{3}^3, 20^2, 24^{10},$ $28^6, 56^1, 58^{20}, \frac{182}{3}^6,$ $61^4, 64^1, 66^4, 68^5,$ $80^2, 108^2, 112^7, 120^1,$ ∞^4	$0^1, 8^6, \frac{32}{3}^3, 20^2, 24^{10},$ $28^6, 56^1, 58^{40}, \frac{182}{3}^{12},$ $61^8, 64^1, 66^4, 68^8,$ $\frac{232}{3}^{222}, 80^2, 108^2, 112^7,$ $120^1, \infty^{129}$
120	10^4	$10^4, 60^{21}, \frac{190}{3}^6, 64^{10},$ ∞^{49}	$0^1, 10^8, \frac{40}{3}^6, \frac{80}{3}^6, \frac{88}{3}^3,$ $30^4, 32^1, 56^2, 60^{21},$ $\frac{190}{3}^6, 64^{11}, 68^2, 70^4,$ $72^1, 104^1, 112^3, 116^6,$ ∞^4	$0^1, 10^8, \frac{40}{3}^6, \frac{80}{3}^6, \frac{88}{3}^3,$ $30^4, 32^1, 56^2, 60^{42},$ $\frac{190}{3}^{12}, 64^{21}, 68^2, 70^4,$ $72^1, 80^{238}, 104^1, 112^3,$ $116^6, \infty^{135}$
124	12^5	$12^5, 62^{20}, 66^2, \frac{133}{2}^8,$ $67^8, 70^2, \infty^{51}$	$0^1, 12^{10}, 16^{10}, \frac{88}{3}^3,$ $32^6, 40^1, 56^1, 60^4,$ $62^{20}, 66^2, \frac{133}{2}^8, 67^8,$ $70^2, 72^4, 76^2, 104^2,$ $116^2, 120^3, 132^2, \infty^5$	$0^1, 12^{10}, 16^{10}, \frac{88}{3}^3, 32^6,$ $40^1, 56^1, 60^4, 62^{40}, 66^4,$ $\frac{133}{2}^{16}, 67^{16}, 70^4, 72^4,$ $76^2, \frac{248}{3}^{255}, 104^2, 116^2,$ $120^3, 132^2, \infty^{142}$
128	$4^1, 14^4$	$4^1, 14^4, 64^{21}, 69^4,$ $70^8, 72^4, 74^4, \infty^{56}$	$0^1, 4^2, 14^8, \frac{56}{3}^{15}, 32^1,$ $34^4, 40^1, \frac{176}{3}^3, 64^{27},$ $69^4, 70^8, 72^4, 74^4,$ $76^2, 80^1, 104^3, 120^1,$ $132^4, 140^4, \infty^5$	$0^1, 4^2, 14^8, \frac{56}{3}^{15}, 32^1,$ $34^4, 40^1, \frac{176}{3}^3, 64^{48}, 69^8,$ $70^{16}, 72^8, 74^8, 76^2, 80^1,$ $\frac{256}{3}^{270}, 104^3, 120^1, 132^4,$ $140^4, \infty^{153}$

Table 15: Slopes for $q = 5$, $i = 1$, type 2. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
3				0^1
7				$\frac{8}{3}^3$
11		∞^1	0^1	$0^1, \frac{16}{3}^3, \infty^2$
15		∞^2	$0^1, 8^1$	$0^1, 8^5, \infty^4$
19		$8^1, \infty^2$	$0^1, 8^2$	$0^1, 8^3, \frac{32}{3}^6, \infty^5$
23		$10^2, \infty^2$	$0^1, 8^1, 10^2$	$0^1, 8^1, 10^4, \frac{40}{3}^9, \infty^6$
27		$12^3, \infty^2$	$4^2, 12^3$	$4^2, 12^6, 16^{13}, \infty^7$
31		$14^4, \infty^2$	$0^1, 8^1, 14^4$	$0^1, 8^1, 14^8, \frac{56}{3}^{18}, \infty^8$
35		$16^3, 24^1, \infty^4$	$0^1, 4^2, 16^3, 24^1, 48^1$	$0^1, 4^2, 16^6, \frac{64}{3}^{21}, 24^2, 48^1, \infty^{12}$
39		$18^4, 24^1, \infty^5$	$0^1, 4^2, 8^1, 18^4, 24^1, 48^1$	$0^1, 4^2, 8^1, 18^8, 24^{27}, 48^1, \infty^{15}$
43		$20^5, 24^1, 32^1, \infty^5$	$0^1, 4^2, 8^1, 20^5, 24^1, 32^1, 48^1$	$0^1, 4^2, 8^1, 20^{10}, 24^2, \frac{80}{3}^{30}, 32^2, 48^1, \infty^{17}$
47		$22^6, 24^1, 34^2, \infty^5$	$\frac{8}{3}^3, 8^1, 22^6, 24^1, 34^2, 48^1$	$\frac{8}{3}^3, 8^1, 22^{12}, 24^2, \frac{88}{3}^{36}, 34^4, 48^1, \infty^{19}$
51		$24^8, 36^3, \infty^5$	$0^1, \frac{16}{3}^3, 24^8, 36^3, 48^1$	$0^1, \frac{16}{3}^3, 24^{16}, 32^{43}, 36^6, 48^1, \infty^{21}$
55		$26^6, 28^4, 38^2, 40^1, \infty^5$	$0^1, 4^2, 8^1, 26^6, 28^4, 38^2, 40^1, 48^1$	$0^1, 4^2, 8^1, 26^{12}, 28^8, \frac{104}{3}^{51}, 38^4, 40^2, 48^1, \infty^{23}$
59	8^1	$8^1, 28^5, 30^4, 40^2, 48^1, \infty^8$	$0^1, 4^2, 8^3, 28^5, 30^4, 40^2, 48^3, \infty^1$	$0^1, 4^2, 8^3, 28^{10}, 30^8, \frac{112}{3}^{60}, 40^4, 48^4, \infty^{28}$
63	12^1	$12^1, 30^6, 32^3, 34^2, 36^1, 48^1, \infty^{10}$	$0^1, 4^2, 8^1, 12^4, 30^6, 32^3, 34^2, 36^1, 48^3, \infty^1$	$0^1, 4^2, 8^1, 12^4, 30^{12}, 32^6, 34^4, 36^2, 40^{67}, 48^4, \infty^{33}$
67	16^1	$16^1, 32^7, 33^4, 34^2, 48^1, 56^1, \infty^{11}$	$\frac{8}{3}^3, 8^1, 16^5, 32^7, 33^4, 34^2, 48^3, 56^1, \infty^1$	$\frac{8}{3}^3, 8^1, 16^5, 32^{14}, 33^8, 34^4, \frac{128}{3}^{75}, 48^4, 56^2, \infty^{37}$
71	20^1	$20^1, 34^{10}, 36^5, 56^1, 60^1, \infty^{12}$	$0^1, \frac{16}{3}^3, 20^6, 34^{10}, 36^5, 48^2, 56^1, 60^1, \infty^1$	$0^1, \frac{16}{3}^3, 20^6, 34^{20}, 36^{10}, \frac{136}{3}^{84}, 48^2, 56^2, 60^2, \infty^{41}$
75	24^1	$24^1, 36^9, 37^4, 38^4, 58^2, \infty^{13}$	$0^1, 4^2, 8^1, 12^2, 24^5, 36^9, 37^4, 38^4, 48^2, 58^2, \infty^1$	$0^1, 4^2, 8^1, 12^2, 24^5, 36^{18}, 37^8, 38^8, 48^{96}, 58^4, \infty^{45}$

79	8^1	$8^1, 38^8, 39^4, 40^7, 60^2, \infty^{14}$	$0^1, 4^2, 8^3, 12^2, 28^4, 38^8, 39^4, 40^7, 48^2, 60^2, \infty^1$	$0^1, 4^2, 8^3, 12^2, 28^4, 38^{16}, 39^8, 40^{14}, 48^2, \frac{152}{3}^{105}, 60^4, \infty^{49}$
83	10^2	$10^2, 40^7, 41^4, 42^8, 60^1, 68^1, \infty^{17}$	$0^1, 4^2, 8^1, 10^4, 12^2, 16^1, 32^3, 40^7, 41^4, 42^8, 48^3, 60^1, 68^1, \infty^2$	$0^1, 4^2, 8^1, 10^4, 12^2, 16^1, 32^3, 40^{14}, 41^8, 42^{16}, 48^3, \frac{160}{3}^{117}, 60^2, 68^2, \infty^{55}$
87	$12^1, 16^1$	$12^1, 16^1, 42^8, \frac{128}{3}^3, 43^4, 44^6, 68^1, \infty^{20}$	$\frac{8}{3}^3, 8^1, 12^2, 14^4, 16^3, 24^1, 36^2, 42^8, \frac{128}{3}^3, 43^4, 44^6, 48^3, 56^1, 68^1, \infty^2$	$\frac{8}{3}^3, 8^1, 12^2, 14^4, 16^3, 24^1, 36^2, 42^{16}, \frac{128}{3}^6, 43^8, 44^{12}, 48^3, 56^{128}, 68^2, \infty^{62}$
91	$16^1, 20^1$	$16^1, 20^1, 44^{12}, \frac{136}{3}^3, 46^8, 80^1, \infty^{22}$	$0^1, \frac{16}{3}^3, 16^4, \frac{56}{3}^3, 20^4, 32^1, 40^1, 44^{12}, \frac{136}{3}^3, 46^8, 48^3, 60^2, 80^1, \infty^2$	$0^1, \frac{16}{3}^3, 16^4, \frac{56}{3}^3, 20^4, 32^1, 40^1, 44^{24}, \frac{136}{3}^6, 46^{16}, 48^3, \frac{176}{3}^{138}, 60^2, 80^2, \infty^{68}$
95	$20^1, 24^1$	$20^1, 24^1, 46^{10}, 47^8, 48^7, 80^1, \infty^{24}$	$0^1, 4^2, 8^1, 12^2, 20^4, \frac{64}{3}^3, 24^4, 40^1, 46^{10}, 47^8, 48^{10}, 64^3, 80^1, \infty^2$	$0^1, 4^2, 8^1, 12^2, 20^4, \frac{64}{3}^3, 24^4, 40^1, 46^{20}, 47^{16}, 48^{17}, \frac{184}{3}^{150}, 64^3, 80^2, \infty^{74}$
99	$8^1, 24^1$	$8^1, 24^1, 48^{11}, 49^8, 50^8, 80^1, \infty^{26}$	$0^1, 4^2, 8^3, 12^2, 16^2, 24^3, 26^4, 28^2, 48^{14}, 49^8, 50^8, 68^4, 80^1, \infty^2$	$0^1, 4^2, 8^3, 12^2, 16^2, 24^3, 26^4, 28^2, 48^{25}, 49^{16}, 50^{16}, 64^{163}, 68^4, 80^2, \infty^{80}$
103	10^2	$10^2, 50^{10}, 51^8, 52^{11}, 72^1, 80^1, \infty^{27}$	$0^1, 4^2, 8^1, 10^4, 12^2, 16^3, 28^2, 30^4, 32^1, 48^3, 50^{10}, 51^8, 52^{11}, 72^4, 80^1, 88^1, \infty^2$	$0^1, 4^2, 8^1, 10^4, 12^2, 16^3, 28^2, 30^4, 32^1, 48^3, 50^{20}, 51^{16}, 52^{22}, \frac{200}{3}^{177}, 72^5, 80^2, 88^1, \infty^{85}$
107	12^3	$12^3, 52^9, \frac{158}{3}^6, 53^4, 54^{10}, 56^1, 72^1, 88^1, \infty^{30}$	$\frac{8}{3}^3, 8^1, 12^6, 14^4, 16^1, 20^2, 32^3, 36^2, 48^4, 52^9, \frac{158}{3}^6, 53^4, 54^{10}, 56^2, 72^1, 76^2, 88^2, \infty^3$	$\frac{8}{3}^3, 8^1, 12^6, 14^4, 16^1, 20^2, 32^3, 36^2, 48^4, 52^{18}, \frac{158}{3}^{12}, 53^8, 54^{20}, 56^3, \frac{208}{3}^{192}, 72^2, 76^2, 88^3, \infty^{92}$
111	$14^2, 20^1$	$14^2, 20^1, 54^{14}, \frac{166}{3}^6, 56^{11}, 60^1, 72^1, \infty^{34}$	$0^1, \frac{16}{3}^3, 14^4, 16^6, \frac{56}{3}^3, 20^2, 24^1, 32^1, 36^2, 40^1, 48^4, 54^{14}, \frac{166}{3}^6, 56^{11}, \frac{176}{3}^3, 60^1, 72^1, 80^1, 88^1, 104^1, \infty^3$	$0^1, \frac{16}{3}^3, 14^4, 16^6, \frac{56}{3}^3, 20^2, 24^1, 32^1, 36^2, 40^1, 48^4, 54^{28}, \frac{166}{3}^{12}, 56^{22}, \frac{176}{3}^3, 60^2, 72^{207}, 80^1, 88^1, 104^1, \infty^{101}$

115	$16^1, 20^1, 24^1$	$16^1, 20^1, 24^1, 56^{11}, 57^{12}, 58^{10}, 64^1, 72^1, \infty^{37}$	$0^1, 8^5, 16^2, 18^4, 20^2, \frac{64}{3}^6, 24^2, 32^1, 40^2, 48^4, 56^{11}, 57^{12}, 58^{10}, \frac{184}{3}^3, 64^3, 72^1, 88^1, 104^1, 112^1, \infty^3$	$0^1, 8^5, 16^2, 18^4, 20^2, \frac{64}{3}^6, 24^2, 32^1, 40^2, 48^4, 56^{22}, 57^{24}, 58^{20}, \frac{184}{3}^3, 64^4, 72^2, \frac{224}{3}^{219}, 88^1, 104^1, 112^1, \infty^{109}$
119	$8^1, 20^1, 24^1$	$8^1, 20^1, 24^1, 58^{12}, 59^{12}, 60^{11}, 68^1, 72^1, \infty^{40}$	$0^1, 8^3, \frac{32}{3}^6, 20^4, 24^9, 28^2, 40^1, 48^4, 58^{12}, 59^{12}, 60^{11}, 64^1, 66^4, 68^3, 72^1, 108^2, 120^1, \infty^3$	$0^1, 8^3, \frac{32}{3}^6, 20^4, 24^9, 28^2, 40^1, 48^4, 58^{24}, 59^{24}, 60^{22}, 64^1, 66^4, 68^4, 72^2, \frac{232}{3}^{234}, 108^2, 120^1, \infty^{117}$
123	$10^2, 24^1$	$10^2, 24^1, 60^{13}, 61^{12}, 62^{12}, 64^2, 92^1, \infty^{42}$	$0^1, 8^1, 10^4, \frac{40}{3}^9, 24^2, \frac{80}{3}^6, 30^4, 48^4, 60^{13}, 61^{12}, 62^{12}, 64^2, 68^2, 70^4, 72^1, 88^1, 92^1, 112^3, \infty^3$	$0^1, 8^1, 10^4, \frac{40}{3}^9, 24^2, \frac{80}{3}^6, 30^4, 48^4, 60^{26}, 61^{24}, 62^{24}, 64^4, 68^2, 70^4, 72^1, 80^{250}, 88^1, 92^2, 112^3, \infty^{124}$
127	12^3	$12^3, 62^{12}, \frac{188}{3}^9, 63^4, 64^{14}, 66^2, 72^1, 94^2, \infty^{43}$	$4^2, 12^6, 16^{10}, 24^2, \frac{88}{3}^3, 32^6, 48^3, 56^1, 62^{12}, \frac{188}{3}^9, 63^4, 64^{14}, 66^2, 72^4, 76^2, 88^2, 94^2, 116^2, 128^1, \infty^3$	$4^2, 12^6, 16^{10}, 24^2, \frac{88}{3}^3, 32^6, 48^3, 56^1, 62^{24}, \frac{188}{3}^{18}, 63^8, 64^{28}, 66^4, 72^5, 76^2, \frac{248}{3}^{267}, 88^2, 94^4, 116^2, 128^1, \infty^{130}$

Table 16: Slopes for $q = 5$, $i = 1$, type 3. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
2				
6				$0^{\mathbf{1}}$
10				$\frac{8}{3}^{\mathbf{3}}$
14				$\frac{16}{3}^{\mathbf{6}}$
18		$\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{1}}, 8^{\mathbf{7}}, \infty^{\mathbf{2}}$
22		$\infty^{\mathbf{2}}$	$0^{\mathbf{1}}, 8^{\mathbf{1}}$	$0^{\mathbf{1}}, 8^{\mathbf{1}}, \frac{32}{3}^{\mathbf{9}}, \infty^{\mathbf{4}}$
26		$\infty^{\mathbf{3}}$	$0^{\mathbf{1}}, 8^{\mathbf{1}}, 16^{\mathbf{1}}$	$0^{\mathbf{1}}, 8^{\mathbf{1}}, \frac{40}{3}^{\mathbf{12}}, 16^{\mathbf{1}}, \infty^{\mathbf{6}}$
30		$12^{\mathbf{1}}, \infty^{\mathbf{3}}$	$4^{\mathbf{2}}, 12^{\mathbf{1}}, 16^{\mathbf{1}}$	$4^{\mathbf{2}}, 12^{\mathbf{2}}, 16^{\mathbf{17}}, \infty^{\mathbf{7}}$
34		$14^{\mathbf{2}}, \infty^{\mathbf{3}}$	$8^{\mathbf{3}}, 14^{\mathbf{2}}$	$8^{\mathbf{3}}, 14^{\mathbf{4}}, \frac{56}{3}^{\mathbf{21}}, \infty^{\mathbf{8}}$
38		$16^{\mathbf{3}}, \infty^{\mathbf{3}}$	$0^{\mathbf{1}}, 12^{\mathbf{2}}, 16^{\mathbf{3}}$	$0^{\mathbf{1}}, 12^{\mathbf{2}}, 16^{\mathbf{6}}, \frac{64}{3}^{\mathbf{27}}, \infty^{\mathbf{9}}$
42		$18^{\mathbf{2}}, 24^{\mathbf{1}}, \infty^{\mathbf{5}}$	$0^{\mathbf{1}}, 4^{\mathbf{2}}, 16^{\mathbf{1}}, 18^{\mathbf{2}}, 24^{\mathbf{1}}, 48^{\mathbf{1}}$	$0^{\mathbf{1}}, 4^{\mathbf{2}}, 16^{\mathbf{1}}, 18^{\mathbf{4}}, 24^{\mathbf{33}}, 48^{\mathbf{1}}, \infty^{\mathbf{13}}$
46		$20^{\mathbf{1}}, 24^{\mathbf{1}}, 28^{\mathbf{1}}, \infty^{\mathbf{7}}$	$0^{\mathbf{1}}, 4^{\mathbf{2}}, 8^{\mathbf{1}}, 16^{\mathbf{1}}, 20^{\mathbf{1}}, 24^{\mathbf{1}}, 28^{\mathbf{1}}, 48^{\mathbf{1}}, 56^{\mathbf{1}}$	$0^{\mathbf{1}}, 4^{\mathbf{2}}, 8^{\mathbf{1}}, 16^{\mathbf{1}}, 20^{\mathbf{2}}, 24^{\mathbf{2}}, \frac{80}{3}^{\mathbf{36}}, 28^{\mathbf{2}}, 48^{\mathbf{1}}, 56^{\mathbf{1}}, \infty^{\mathbf{17}}$
50		$22^{\mathbf{2}}, 24^{\mathbf{1}}, 28^{\mathbf{1}}, \infty^{\mathbf{8}}$	$\frac{8}{3}^{\mathbf{3}}, 8^{\mathbf{1}}, 16^{\mathbf{2}}, 22^{\mathbf{2}}, 24^{\mathbf{1}}, 28^{\mathbf{1}}, 48^{\mathbf{1}}, 56^{\mathbf{1}}$	$\frac{8}{3}^{\mathbf{3}}, 8^{\mathbf{1}}, 16^{\mathbf{2}}, 22^{\mathbf{4}}, 24^{\mathbf{2}}, 28^{\mathbf{2}}, \frac{88}{3}^{\mathbf{42}}, 48^{\mathbf{1}}, 56^{\mathbf{1}}, \infty^{\mathbf{20}}$
54		$24^{\mathbf{4}}, 28^{\mathbf{1}}, 36^{\mathbf{1}}, \infty^{\mathbf{8}}$	$\frac{16}{3}^{\mathbf{3}}, 8^{\mathbf{2}}, 16^{\mathbf{1}}, 24^{\mathbf{4}}, 28^{\mathbf{1}}, 36^{\mathbf{1}}, 48^{\mathbf{1}}, 56^{\mathbf{1}}$	$\frac{16}{3}^{\mathbf{3}}, 8^{\mathbf{2}}, 16^{\mathbf{1}}, 24^{\mathbf{8}}, 28^{\mathbf{2}}, 32^{\mathbf{49}}, 36^{\mathbf{2}}, 48^{\mathbf{1}}, 56^{\mathbf{1}}, \infty^{\mathbf{22}}$
58		$26^{\mathbf{6}}, 38^{\mathbf{2}}, \infty^{\mathbf{8}}$	$0^{\mathbf{1}}, 8^{\mathbf{1}}, 10^{\mathbf{4}}, 26^{\mathbf{6}}, 38^{\mathbf{2}}, 52^{\mathbf{2}}$	$0^{\mathbf{1}}, 8^{\mathbf{1}}, 10^{\mathbf{4}}, 26^{\mathbf{12}}, \frac{104}{3}^{\mathbf{57}}, 38^{\mathbf{4}}, 52^{\mathbf{2}}, \infty^{\mathbf{24}}$
62		$28^{\mathbf{4}}, 30^{\mathbf{4}}, 40^{\mathbf{2}}, \infty^{\mathbf{8}}$	$0^{\mathbf{1}}, 4^{\mathbf{2}}, 12^{\mathbf{2}}, 16^{\mathbf{1}}, 28^{\mathbf{4}}, 30^{\mathbf{4}}, 40^{\mathbf{2}}, 48^{\mathbf{1}}, 56^{\mathbf{1}}$	$0^{\mathbf{1}}, 4^{\mathbf{2}}, 12^{\mathbf{2}}, 16^{\mathbf{1}}, 28^{\mathbf{8}}, 30^{\mathbf{8}}, \frac{112}{3}^{\mathbf{66}}, 40^{\mathbf{4}}, 48^{\mathbf{1}}, 56^{\mathbf{1}}, \infty^{\mathbf{26}}$
66		$30^{\mathbf{2}}, 32^{\mathbf{4}}, 38^{\mathbf{2}}, 40^{\mathbf{1}}, 48^{\mathbf{1}}, \infty^{\mathbf{11}}$	$0^{\mathbf{1}}, 4^{\mathbf{2}}, 8^{\mathbf{3}}, 16^{\mathbf{1}}, 30^{\mathbf{2}}, 32^{\mathbf{4}}, 38^{\mathbf{2}}, 40^{\mathbf{1}}, 48^{\mathbf{3}}, 76^{\mathbf{2}}$	$0^{\mathbf{1}}, 4^{\mathbf{2}}, 8^{\mathbf{3}}, 16^{\mathbf{1}}, 30^{\mathbf{4}}, 32^{\mathbf{8}}, 38^{\mathbf{4}}, 40^{\mathbf{75}}, 48^{\mathbf{4}}, 76^{\mathbf{2}}, \infty^{\mathbf{32}}$
70		$32^{\mathbf{3}}, 33^{\mathbf{4}}, 38^{\mathbf{2}}, 48^{\mathbf{1}}, 52^{\mathbf{1}}, \infty^{\mathbf{13}}$	$\frac{8}{3}^{\mathbf{3}}, 8^{\mathbf{3}}, 12^{\mathbf{2}}, 32^{\mathbf{3}}, 33^{\mathbf{4}}, 38^{\mathbf{2}}, 48^{\mathbf{3}}, 52^{\mathbf{1}}, 56^{\mathbf{1}}, 76^{\mathbf{2}}$	$\frac{8}{3}^{\mathbf{3}}, 8^{\mathbf{3}}, 12^{\mathbf{2}}, 32^{\mathbf{6}}, 33^{\mathbf{8}}, 38^{\mathbf{4}}, \frac{128}{3}^{\mathbf{81}}, 48^{\mathbf{4}}, 52^{\mathbf{2}}, 56^{\mathbf{1}}, 76^{\mathbf{2}}, \infty^{\mathbf{37}}$
74		$34^{\mathbf{6}}, 36^{\mathbf{3}}, 38^{\mathbf{2}}, 52^{\mathbf{1}}, 56^{\mathbf{1}}, \infty^{\mathbf{14}}$	$\frac{16}{3}^{\mathbf{6}}, 12^{\mathbf{2}}, 16^{\mathbf{1}}, 34^{\mathbf{6}}, 36^{\mathbf{3}}, 38^{\mathbf{2}}, 48^{\mathbf{2}}, 52^{\mathbf{1}}, 56^{\mathbf{2}}, 76^{\mathbf{2}}$	$\frac{16}{3}^{\mathbf{6}}, 12^{\mathbf{2}}, 16^{\mathbf{1}}, 34^{\mathbf{12}}, 36^{\mathbf{6}}, 38^{\mathbf{4}}, \frac{136}{3}^{\mathbf{90}}, 48^{\mathbf{2}}, 52^{\mathbf{2}}, 56^{\mathbf{3}}, 76^{\mathbf{2}}, \infty^{\mathbf{41}}$

78		36^9, 38^2, 40^2, 58^2, 60^1, ∞^{14}	0^1, 8^7, 16^1, 36^9, 38^2, 40^2, 48^1, 56^2, 58^2, 60^1, 72^2	0^1, 8^7, 16^1, 36^{18}, 38^4, 40^4, 48^{101}, 56^2, 58^4, 60^2, 72^2, ∞^{44}
82		38^6, 39^4, 40^5, 60^2, 62^2, ∞^{14}	0^1, 4^2, $\frac{32}{3}^6$, 38^6, 39^4, 40^5, 48^1, 52^2, 60^2, 62^2, 76^2	0^1, 4^2, $\frac{32}{3}^6$, 38^{12}, 39^8, 40^{10}, 48^1, $\frac{152}{3}^{111}$, 52^2, 60^4, 62^4, 76^2, ∞^{47}
86		40^3, 41^4, 42^4, 44^2, 48^4, $\frac{148}{3}^3$, 64^1, 68^1, ∞^{14}	0^1, 4^2, 8^3, $\frac{40}{3}^3$, 40^3, 41^4, 42^4, 44^2, 48^6, $\frac{148}{3}^3$, 56^2, 64^1, 68^1, 96^1	0^1, 4^2, 8^3, $\frac{40}{3}^3$, 40^6, 41^8, 42^8, 44^4, 48^{10}, $\frac{148}{3}^6$, $\frac{160}{3}^{123}$, 56^2, 64^2, 68^2, 96^1, ∞^{50}
90	12^1	12^1, 42^2, $\frac{128}{3}^3$, 43^4, 44^2, 45^4, 48^1, 52^1, 64^1, 68^1, 72^2, ∞^{18}	$\frac{8}{3}^3$, 8^3, 12^4, 16^1, 42^2, $\frac{128}{3}^3$, 43^4, 44^2, 45^4, 48^3, 52^3, 56^1, 64^1, 68^1, 72^2, 96^2, ∞^1	$\frac{8}{3}^3$, 8^3, 12^4, 16^1, 42^4, $\frac{128}{3}^6$, 43^8, 44^4, 45^8, 48^4, 52^4, 56^{137}, 64^2, 68^2, 72^4, 96^2, ∞^{57}
94	16^1	16^1, 44^6, $\frac{136}{3}^3$, 46^8, 48^1, 52^1, 72^2, 76^1, ∞^{21}	$\frac{16}{3}^6$, 12^2, 16^5, 44^6, $\frac{136}{3}^3$, 46^8, 48^3, 52^3, 56^2, 72^2, 76^1, 96^2, ∞^1	$\frac{16}{3}^6$, 12^2, 16^5, 44^{12}, $\frac{136}{3}^6$, 46^{16}, 48^4, 52^4, 56^2, $\frac{176}{3}^{147}$, 72^4, 76^2, 96^2, ∞^{64}
98	20^1	20^1, 46^{10}, 48^5, 49^4, 50^2, 60^1, 76^1, 80^1, ∞^{23}	0^1, 8^7, 16^1, 20^6, 46^{10}, 48^6, 49^4, 50^2, 52^4, 56^1, 60^1, 76^1, 80^1, 96^2, ∞^1	0^1, 8^7, 16^1, 20^6, 46^{20}, 48^{11}, 49^8, 50^4, 52^4, 56^1, 60^2, $\frac{184}{3}^{159}$, 76^2, 80^2, 96^2, ∞^{70}
102	24^1	24^1, 48^8, 49^8, 50^4, 52^3, 62^2, 80^1, 84^1, ∞^{24}	0^1, 4^2, $\frac{32}{3}^6$, 16^2, 24^5, 48^9, 49^8, 50^4, $\frac{152}{3}^3$, 52^3, 56^2, 62^2, 80^1, 84^1, 96^2, ∞^1	0^1, 4^2, $\frac{32}{3}^6$, 16^2, 24^5, 48^{17}, 49^{16}, 50^8, $\frac{152}{3}^3$, 52^6, 56^2, 62^4, 64^{172}, 80^2, 84^2, 96^2, ∞^{75}
106	28^1	28^1, 50^4, 51^8, 52^8, 54^6, 60^1, 64^1, 80^1, 84^1, ∞^{25}	0^1, 4^2, 8^3, $\frac{40}{3}^3$, 16^2, 20^2, 28^4, 48^2, 50^4, 51^8, 52^8, $\frac{160}{3}^3$, 54^6, 56^1, 60^1, 64^1, 80^1, 84^1, 96^2, ∞^1	0^1, 4^2, 8^3, $\frac{40}{3}^3$, 16^2, 20^2, 28^4, 48^2, 50^8, 51^{16}, 52^{16}, $\frac{160}{3}^3$, 54^{12}, 56^1, 60^2, 64^2, $\frac{200}{3}^{186}$, 80^2, 84^2, 96^2, ∞^{80}
110	12^1	12^1, 52^3, $\frac{158}{3}^6$, 53^4, 54^4, 55^8, 56^4, 64^1, 68^1, 84^1, 88^1, ∞^{26}	$\frac{8}{3}^3$, 8^3, 12^4, 16^1, 18^4, 32^3, 48^2, 52^5, $\frac{158}{3}^6$, 53^4, 54^4, 55^8, 56^6, 64^1, 68^1, 84^1, 88^1, 96^2, ∞^1	$\frac{8}{3}^3$, 8^3, 12^4, 16^1, 18^4, 32^3, 48^2, 52^8, $\frac{158}{3}^{12}$, 53^8, 54^8, 55^{16}, 56^{10}, 64^2, 68^2, $\frac{208}{3}^{201}$, 84^2, 88^2, 96^2, ∞^{85}

114	14^2	14^2, 54^6, $\frac{166}{3}^6$, 56^{13}, 58^4, 68^1, 76^1, 92^2, ∞^{30}	$\frac{16}{3}^6$, 12^2, 14^4, 16^3, 20^2, 24^1, 36^2, 48^3, 52^2, 54^6, $\frac{166}{3}^6$, 56^{15}, 58^4, 68^1, 76^1, 92^2, 96^3, ∞^2	$\frac{16}{3}^6$, 12^2, 14^4, 16^3, 20^2, 24^1, 36^2, 48^3, 52^2, 54^{12}, $\frac{166}{3}^{12}$, 56^{28}, 58^8, 68^2, 72^{217}, 76^2, 92^4, 96^3, ∞^{93}
118	16^1, 20^1	16^1, 20^1, 56^{11}, 58^8, $\frac{117}{2}^8$, 59^4, 60^1, 76^1, 96^1, ∞^{34}	0^1, 8^7, 16^3, 18^4, 20^4, 24^1, 32^1, 40^1, 48^2, 52^4, 56^{13}, 58^8, $\frac{117}{2}^8$, 59^4, 60^1, 64^1, 76^1, 96^4, ∞^2	0^1, 8^7, 16^3, 18^4, 20^4, 24^1, 32^1, 40^1, 48^2, 52^4, 56^{24}, 58^{16}, $\frac{117}{2}^{16}$, 59^8, 60^2, 64^1, $\frac{224}{3}^{231}$, 76^2, 96^5, ∞^{102}
122	20^1, 24^1	20^1, 24^1, 58^8, 59^{12}, 60^5, 61^4, 62^6, 84^1, ∞^{37}	0^1, 8^1, $\frac{32}{3}^9$, 20^4, 22^4, 24^3, 32^1, 40^1, 48^2, $\frac{152}{3}^3$, 56^3, 58^8, 59^{12}, 60^5, 61^4, 62^6, 64^1, 72^1, 84^1, 96^3, ∞^2	0^1, 8^1, $\frac{32}{3}^9$, 20^4, 22^4, 24^3, 32^1, 48^2, $\frac{152}{3}^3$, 56^3, 58^{16}, 59^{24}, 60^{10}, 61^8, 62^{12}, 64^1, 72^1, $\frac{232}{3}^{246}$, 84^2, 96^3, ∞^{110}
126	24^1, 28^1	24^1, 28^1, 60^5, 61^{12}, 62^{12}, 64^9, 84^1, ∞^{39}	0^1, 8^1, $\frac{40}{3}^{12}$, 16^1, 24^4, $\frac{80}{3}^3$, 28^2, 40^1, 48^3, $\frac{160}{3}^3$, 56^2, 60^5, 61^{12}, 62^{12}, 64^9, 68^2, 80^1, 84^1, 96^3, ∞^2	0^1, 8^1, $\frac{40}{3}^{12}$, 16^1, 24^4, $\frac{80}{3}^3$, 28^2, 40^1, 48^3, $\frac{160}{3}^3$, 56^2, 60^{10}, 61^{24}, 62^{24}, 64^{18}, 68^2, 80^{263}, 84^2, 96^3, ∞^{117}
130	12^1, 28^1	12^1, 28^1, 62^4, $\frac{188}{3}^9$, 63^4, 64^{10}, 65^8, 66^6, 84^1, ∞^{41}	4^2, 12^2, 16^{14}, 24^2, 28^2, $\frac{88}{3}^3$, 32^2, 48^1, 52^4, 56^2, 62^4, $\frac{188}{3}^9$, 63^4, 64^{10}, 65^8, 66^6, 72^4, 84^1, 96^3, ∞^2	4^2, 12^2, 16^{14}, 24^2, 28^2, $\frac{88}{3}^3$, 32^2, 48^1, 52^4, 56^2, 62^8, $\frac{188}{3}^{18}$, 63^8, 64^{20}, 65^{16}, 66^{12}, 72^4, $\frac{248}{3}^{279}$, 84^2, 96^3, ∞^{124}

4.2 $i = 2$.

Table 17: Slopes for $q = 5$, $i = 2$, type 0. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
1				
5				
9				$0^{\mathbf{1}}$
13				$\frac{4}{3}^{\mathbf{3}}$
17				$\frac{8}{3}^{\mathbf{6}}$
21				$4^{\mathbf{10}}$
25		$0^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{2}}$, $\frac{16}{3}^{\mathbf{12}}$, $\infty^{\mathbf{1}}$
29		$0^{\mathbf{1}}$, $4^{\mathbf{1}}$	$0^{\mathbf{1}}$, $4^{\mathbf{1}}$	$0^{\mathbf{2}}$, $4^{\mathbf{2}}$, $\frac{20}{3}^{\mathbf{15}}$, $\infty^{\mathbf{2}}$
33		$2^{\mathbf{2}}$, $8^{\mathbf{1}}$	$2^{\mathbf{2}}$, $8^{\mathbf{1}}$	$2^{\mathbf{4}}$, $8^{\mathbf{21}}$, $\infty^{\mathbf{3}}$
37		$4^{\mathbf{3}}$, $12^{\mathbf{1}}$	$4^{\mathbf{3}}$, $12^{\mathbf{1}}$	$4^{\mathbf{6}}$, $\frac{28}{3}^{\mathbf{24}}$, $12^{\mathbf{2}}$, $\infty^{\mathbf{4}}$
41		$0^{\mathbf{1}}$, $6^{\mathbf{4}}$	$6^{\mathbf{4}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $6^{\mathbf{8}}$, $\frac{32}{3}^{\mathbf{30}}$, $\infty^{\mathbf{6}}$
45		$0^{\mathbf{3}}$, $8^{\mathbf{3}}$	$0^{\mathbf{1}}$, $8^{\mathbf{3}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{4}}$, $8^{\mathbf{6}}$, $12^{\mathbf{37}}$, $\infty^{\mathbf{8}}$
49		$0^{\mathbf{2}}$, $2^{\mathbf{2}}$, $8^{\mathbf{1}}$, $10^{\mathbf{2}}$, $24^{\mathbf{1}}$	$0^{\mathbf{1}}$, $2^{\mathbf{2}}$, $10^{\mathbf{2}}$, $24^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{3}}$, $2^{\mathbf{4}}$, $8^{\mathbf{1}}$, $10^{\mathbf{4}}$, $\frac{40}{3}^{\mathbf{42}}$, $24^{\mathbf{2}}$, $\infty^{\mathbf{10}}$
53		$\frac{4}{3}^{\mathbf{3}}$, $4^{\mathbf{2}}$, $8^{\mathbf{1}}$, $12^{\mathbf{2}}$, $24^{\mathbf{1}}$, $28^{\mathbf{1}}$	$\frac{4}{3}^{\mathbf{3}}$, $4^{\mathbf{1}}$, $8^{\mathbf{1}}$, $12^{\mathbf{1}}$, $24^{\mathbf{1}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$\frac{4}{3}^{\mathbf{6}}$, $4^{\mathbf{3}}$, $8^{\mathbf{2}}$, $12^{\mathbf{3}}$, $\frac{44}{3}^{\mathbf{48}}$, $24^{\mathbf{2}}$, $28^{\mathbf{2}}$, $\infty^{\mathbf{12}}$
57		$\frac{8}{3}^{\mathbf{3}}$, $4^{\mathbf{2}}$, $8^{\mathbf{2}}$, $12^{\mathbf{1}}$, $16^{\mathbf{1}}$, $24^{\mathbf{1}}$, $28^{\mathbf{1}}$, $32^{\mathbf{1}}$	$\frac{8}{3}^{\mathbf{3}}$, $4^{\mathbf{2}}$, $8^{\mathbf{1}}$, $12^{\mathbf{1}}$, $24^{\mathbf{1}}$, $28^{\mathbf{1}}$, $32^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$\frac{8}{3}^{\mathbf{6}}$, $4^{\mathbf{4}}$, $8^{\mathbf{3}}$, $12^{\mathbf{2}}$, $16^{\mathbf{56}}$, $24^{\mathbf{2}}$, $28^{\mathbf{2}}$, $32^{\mathbf{2}}$, $\infty^{\mathbf{14}}$
61		$0^{\mathbf{2}}$, $4^{\mathbf{1}}$, $5^{\mathbf{4}}$, $6^{\mathbf{2}}$, $12^{\mathbf{2}}$, $26^{\mathbf{2}}$, $32^{\mathbf{1}}$	$4^{\mathbf{1}}$, $5^{\mathbf{4}}$, $6^{\mathbf{2}}$, $12^{\mathbf{1}}$, $26^{\mathbf{2}}$, $32^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{2}}$, $4^{\mathbf{2}}$, $5^{\mathbf{8}}$, $6^{\mathbf{4}}$, $12^{\mathbf{3}}$, $\frac{52}{3}^{\mathbf{63}}$, $26^{\mathbf{4}}$, $32^{\mathbf{2}}$, $\infty^{\mathbf{17}}$
65		$0^{\mathbf{5}}$, $6^{\mathbf{2}}$, $7^{\mathbf{4}}$, $8^{\mathbf{1}}$, $24^{\mathbf{1}}$, $28^{\mathbf{3}}$	$0^{\mathbf{1}}$, $6^{\mathbf{2}}$, $7^{\mathbf{4}}$, $8^{\mathbf{1}}$, $28^{\mathbf{3}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{6}}$, $6^{\mathbf{4}}$, $7^{\mathbf{8}}$, $8^{\mathbf{2}}$, $\frac{56}{3}^{\mathbf{72}}$, $24^{\mathbf{1}}$, $28^{\mathbf{6}}$, $\infty^{\mathbf{21}}$
69		$0^{\mathbf{3}}$, $2^{\mathbf{2}}$, $4^{\mathbf{4}}$, $8^{\mathbf{3}}$, $10^{\mathbf{2}}$, $20^{\mathbf{1}}$, $24^{\mathbf{1}}$, $30^{\mathbf{2}}$	$0^{\mathbf{1}}$, $2^{\mathbf{2}}$, $8^{\mathbf{3}}$, $10^{\mathbf{2}}$, $24^{\mathbf{1}}$, $30^{\mathbf{2}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{4}}$, $2^{\mathbf{4}}$, $4^{\mathbf{4}}$, $8^{\mathbf{6}}$, $10^{\mathbf{4}}$, $20^{\mathbf{83}}$, $24^{\mathbf{2}}$, $30^{\mathbf{4}}$, $\infty^{\mathbf{25}}$
73		$\frac{4}{3}^{\mathbf{3}}$, $2^{\mathbf{4}}$, $4^{\mathbf{3}}$, $10^{\mathbf{2}}$, $12^{\mathbf{3}}$, $24^{\mathbf{2}}$, $32^{\mathbf{2}}$, $38^{\mathbf{2}}$	$\frac{4}{3}^{\mathbf{3}}$, $4^{\mathbf{3}}$, $10^{\mathbf{2}}$, $12^{\mathbf{1}}$, $24^{\mathbf{2}}$, $32^{\mathbf{1}}$, $38^{\mathbf{2}}$, $\infty^{\mathbf{7}}$	$\frac{4}{3}^{\mathbf{6}}$, $2^{\mathbf{4}}$, $4^{\mathbf{6}}$, $10^{\mathbf{4}}$, $12^{\mathbf{4}}$, $\frac{64}{3}^{\mathbf{90}}$, $24^{\mathbf{4}}$, $32^{\mathbf{3}}$, $38^{\mathbf{4}}$, $\infty^{\mathbf{28}}$
77		$\frac{8}{3}^{\mathbf{6}}$, $4^{\mathbf{2}}$, $6^{\mathbf{2}}$, $8^{\mathbf{2}}$, $12^{\mathbf{2}}$, $16^{\mathbf{2}}$, $24^{\mathbf{2}}$, $28^{\mathbf{1}}$, $36^{\mathbf{1}}$, $38^{\mathbf{2}}$, $42^{\mathbf{2}}$	$\frac{8}{3}^{\mathbf{6}}$, $6^{\mathbf{2}}$, $12^{\mathbf{2}}$, $24^{\mathbf{2}}$, $28^{\mathbf{1}}$, $38^{\mathbf{2}}$, $42^{\mathbf{2}}$, $\infty^{\mathbf{7}}$	$\frac{8}{3}^{\mathbf{12}}$, $4^{\mathbf{2}}$, $6^{\mathbf{4}}$, $8^{\mathbf{2}}$, $12^{\mathbf{4}}$, $16^{\mathbf{2}}$, $\frac{68}{3}^{\mathbf{99}}$, $24^{\mathbf{4}}$, $28^{\mathbf{2}}$, $36^{\mathbf{1}}$, $38^{\mathbf{4}}$, $42^{\mathbf{4}}$, $\infty^{\mathbf{31}}$

81		0^3, 4^7, 6^2, 8^3, 12^3, 24^1, 28^2, 32^1, 36^2, 40^1, 42^2	4^7, 6^2, 8^1, 12^1, 24^1, 28^2, 32^1, 36^2, 42^2, ∞^8	0^3, 4^{14}, 6^4, 8^4, 12^4, 24^{111}, 28^4, 32^2, 36^4, 40^1, 42^4, ∞^{35}
85		0^7, 4^1, $\frac{16}{3}^6$, 7^4, 12^3, 26^2, 30^2, 38^2, 40^2, 44^1	0^1, $\frac{16}{3}^6$, 7^4, 12^1, 26^2, 30^2, 38^2, 40^2, ∞^{10}	0^8, 4^1, $\frac{16}{3}^{12}$, 7^8, 12^4, $\frac{76}{3}^{120}$, 26^4, 30^4, 38^4, 40^4, 44^1, ∞^{40}
89		0^4, 2^6, 4^4, $\frac{20}{3}^3$, 8^6, 24^1, 28^3, 40^5, 48^1	0^1, 2^2, $\frac{20}{3}^3$, 8^6, 24^1, 28^3, 40^4, ∞^{13}	0^5, 2^8, 4^4, $\frac{20}{3}^6$, 8^{12}, 24^2, $\frac{80}{3}^{132}$, 28^6, 40^9, 48^1, ∞^{46}
93		$\frac{4}{3}^6$, 2^4, 4^5, 6^4, 8^1, 9^4, 12^2, 24^2, 28^1, 30^2, 42^2, 44^1, 48^1, 52^1	$\frac{4}{3}^3$, 4^3, 8^1, 9^4, 12^1, 24^2, 28^1, 30^2, 42^2, 48^1, ∞^{16}	$\frac{4}{3}^9$, 2^4, 4^8, 6^4, 8^2, 9^8, 12^3, 24^4, 28^{147}, 30^4, 42^4, 44^1, 48^2, 52^1, ∞^{52}
97		$\frac{8}{3}^9$, 4^6, 6^4, 8^1, 10^2, 12^1, 16^4, 24^2, 26^2, 28^1, 32^1, 48^2, 52^3, 56^2	$\frac{8}{3}^6$, 6^4, 10^2, 12^1, 24^2, 26^2, 28^1, 32^1, 48^2, 52^3, ∞^{16}	$\frac{8}{3}^{15}$, 4^6, 6^8, 8^1, 10^4, 12^2, 16^4, 24^4, 26^4, 28^2, $\frac{88}{3}^{156}$, 32^2, 48^4, 52^6, 56^2, ∞^{56}
101		0^4, 4^{11}, 6^4, 8^5, 12^4, 20^1, 24^1, 26^4, 28^1, 32^1, 48^2, 52^4, 60^2	4^{10}, 8^3, 12^1, 24^1, 26^4, 28^1, 32^1, 48^2, 52^4, ∞^{17}	0^4, 4^{21}, 6^4, 8^8, 12^5, 20^1, 24^2, 26^8, 28^2, $\frac{92}{3}^{168}$, 32^2, 48^4, 52^8, 60^2, ∞^{61}
105		0^9, 4^2, $\frac{16}{3}^{12}$, 8^3, 10^2, 12^4, $\frac{76}{3}^3$, 28^2, 30^2, 32^1, 48^2, 50^2, 52^2, 64^2	0^1, $\frac{16}{3}^{12}$, 10^2, $\frac{76}{3}^3$, 28^2, 30^2, 32^1, 48^2, 50^2, 52^2, ∞^{19}	0^{10}, 4^2, $\frac{16}{3}^{24}$, 8^3, 10^4, 12^4, $\frac{76}{3}^6$, 28^4, 30^4, 32^{183}, 48^4, 50^4, 52^4, 64^2, ∞^{67}
109		0^5, 2^{10}, 4^2, $\frac{20}{3}^{12}$, 8^2, 12^4, 24^1, $\frac{80}{3}^3$, 28^3, 32^2, 48^1, 50^4, 52^2, 68^1	0^1, 2^2, $\frac{20}{3}^{12}$, 12^1, 24^1, $\frac{80}{3}^3$, 28^2, 32^2, 48^1, 50^4, 52^1, ∞^{22}	0^6, 2^{12}, 4^2, $\frac{20}{3}^{24}$, 8^2, 12^5, 24^2, $\frac{80}{3}^6$, 28^5, 32^4, $\frac{100}{3}^{195}$, 48^2, 50^8, 52^3, 68^1, ∞^{74}
113		$\frac{4}{3}^9$, 2^4, 4^7, 6^8, 8^{10}, 24^3, 28^2, 29^4, 48^1, 50^2, 52^3, 64^1, 72^2	$\frac{4}{3}^3$, 4^3, 8^{10}, 24^2, 28^2, 29^4, 48^1, 50^2, 52^3, ∞^{26}	$\frac{4}{3}^{12}$, 2^4, 4^{10}, 6^8, 8^{20}, 24^5, 28^4, 29^8, $\frac{104}{3}^{210}$, 48^2, 50^4, 52^6, 64^1, 72^2, ∞^{82}
117		$\frac{8}{3}^{12}$, 4^{10}, 6^4, 8^8, $\frac{28}{3}^6$, 16^2, 24^2, 26^2, 28^2, 30^2, 32^2, 48^2, 52^1, 62^2, 68^1, 76^2	$\frac{8}{3}^6$, 6^4, $\frac{28}{3}^6$, 24^2, 26^2, 28^1, 30^2, 32^2, 48^2, 52^1, 62^2, ∞^{30}	$\frac{8}{3}^{18}$, 4^{10}, 6^8, 8^8, $\frac{28}{3}^{12}$, 16^2, 24^4, 26^4, 28^3, 30^4, 32^4, 36^{226}, 48^4, 52^2, 62^4, 68^1, 76^2, ∞^{90}
121	0^1	0^5, 4^{12}, 5^8, 6^8, 8^3, $\frac{32}{3}^3$, 12^2, 20^2, 24^1, 26^4, 28^3, 32^2, 40^1, 48^3, 62^4, 80^3, ∞^1	0^1, 4^{10}, 8^3, $\frac{32}{3}^3$, 24^1, 26^4, 28^3, 32^2, 48^3, 62^4, ∞^{31}	0^5, 4^{22}, 5^8, 6^8, 8^6, $\frac{32}{3}^6$, 12^2, 20^2, 24^2, 26^8, 28^6, 32^4, $\frac{112}{3}^{243}$, 40^1, 48^6, 62^8, 80^3, ∞^{95}

| 125 | 0^1 | 0^{11}, 4^3, $\frac{16}{3}^{12}$, 6^4, 8^8, 10^4, 12^5, $\frac{76}{3}^3$, 28^6, 30^2, 44^1, 48^3, 52^1, 62^4, 84^2, ∞^1 | 0^2, $\frac{16}{3}^{12}$, 10^4, 12^1, $\frac{76}{3}^3$, 28^6, 30^2, 48^3, 52^1, 62^4, ∞^{32} | 0^{12}, 4^3, $\frac{16}{3}^{24}$, 6^4, 8^8, 10^8, 12^6, $\frac{76}{3}^6$, 28^{12}, 30^4, $\frac{116}{3}^{258}$, 44^1, 48^6, 52^2, 62^8, 84^2, ∞^{101} |
| 129 | 4^1 | 0^6, 2^{12}, 4^5, $\frac{20}{3}^{15}$, 8^3, 10^4, 12^7, 24^1, $\frac{80}{3}^6$, 30^4, 32^1, 48^3, 52^2, 60^2, 62^2, 88^1, ∞^1 | 0^1, 4^2, $\frac{20}{3}^{15}$, 12^3, 24^1, $\frac{80}{3}^6$, 30^4, 32^1, 48^2, 52^2, 60^2, 62^2, ∞^{34} | 0^7, 2^{12}, 4^6, $\frac{20}{3}^{30}$, 8^3, 10^4, 12^{10}, 24^2, $\frac{80}{3}^{12}$, 30^8, 32^2, 40^{274}, 48^5, 52^4, 60^4, 62^4, 88^1, ∞^{108} |

Table 18: Slopes for $q = 5$, $i = 2$, type 1. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
0				0^1
4		0^1	0^1	0^2, ∞^1
8		0^2	0^1, ∞^1	0^3, ∞^3
12		0^3	0^1, ∞^2	0^4, 4^1, ∞^5
16		0^4	0^1, ∞^3	0^5, $\frac{16}{3}^3$, ∞^7
20		0^5	0^1, ∞^4	0^6, $\frac{20}{3}^6$, ∞^9
24		0^6	0^1, ∞^5	0^7, 8^{10}, ∞^{11}
28	0^1	0^7, ∞^1	0^2, ∞^6	0^8, $\frac{28}{3}^{15}$, ∞^{13}
32	0^1	0^8, 4^1, ∞^1	0^2, 4^1, ∞^7	0^9, 4^2, $\frac{32}{3}^{18}$, ∞^{16}
36	0^1	0^9, 6^2, ∞^1	0^2, 6^2, ∞^8	0^{10}, 6^4, 12^{22}, ∞^{19}
40	0^1	0^{10}, 8^3, ∞^1	0^2, 8^3, ∞^9	0^{11}, 8^6, $\frac{40}{3}^{27}$, ∞^{22}
44	0^1	0^{11}, 10^4, ∞^1	0^2, 10^4, ∞^{10}	0^{12}, 10^8, $\frac{44}{3}^{33}$, ∞^{25}
48	0^1	0^{12}, 12^5, ∞^1	0^2, 12^5, ∞^{11}	0^{13}, 12^{10}, 16^{40}, ∞^{28}
52	0^2	0^{13}, 4^2, 14^4, ∞^2	0^3, 4^1, 14^4, ∞^{13}	0^{14}, 4^3, 14^8, $\frac{52}{3}^{48}$, ∞^{32}
56	0^2	0^{14}, $\frac{16}{3}^3$, 8^1, 16^3, 28^1, ∞^2	0^3, $\frac{16}{3}^3$, 16^3, 28^1, ∞^{14}	0^{15}, $\frac{16}{3}^6$, 8^1, 16^6, $\frac{56}{3}^{54}$, 28^2, ∞^{36}
60	0^2	0^{15}, $\frac{20}{3}^3$, 8^2, 12^1, 18^2, 28^1, 32^1, ∞^2	0^3, $\frac{20}{3}^3$, 8^2, 18^2, 28^1, 32^1, ∞^{15}	0^{16}, $\frac{20}{3}^6$, 8^4, 12^1, 18^4, 20^{61}, 28^2, 32^2, ∞^{40}
64	0^2	0^{16}, 8^1, 9^4, 10^2, 16^1, 20^1, 30^2, 36^1, ∞^2	0^3, 8^1, 9^4, 10^2, 20^1, 30^2, 36^1, ∞^{16}	0^{17}, 8^2, 9^8, 10^4, 16^1, 20^2, $\frac{64}{3}^{69}$, 30^4, 36^2, ∞^{44}
68	0^2	0^{17}, 10^2, 11^4, 12^3, 20^1, 32^3, 40^1, ∞^2	0^3, 10^2, 11^4, 12^3, 32^3, 40^1, ∞^{17}	0^{18}, 10^4, 11^8, 12^6, 20^1, $\frac{68}{3}^{78}$, 32^6, 40^2, ∞^{48}
72	0^2	0^{18}, 4^3, 12^3, 13^4, 14^2, 34^4, ∞^2	0^3, 4^1, 12^3, 13^4, 14^2, 34^4, ∞^{19}	0^{19}, 4^4, 12^6, 13^8, 14^4, 24^{88}, 34^8, ∞^{53}
76	0^3	0^{19}, $\frac{16}{3}^3$, 6^4, 14^4, 16^3, 28^1, 36^3, ∞^3	0^4, $\frac{16}{3}^3$, 14^4, 16^3, 28^1, 36^3, ∞^{22}	0^{20}, $\frac{16}{3}^6$, 6^4, 14^8, 16^6, $\frac{76}{3}^{99}$, 28^2, 36^6, ∞^{59}
80	0^3	0^{20}, $\frac{20}{3}^6$, 8^2, 12^2, 16^3, 18^2, 28^2, 38^2, 42^2, ∞^3	0^4, $\frac{20}{3}^6$, 16^3, 18^2, 28^2, 38^2, 42^2, ∞^{23}	0^{21}, $\frac{20}{3}^{12}$, 8^2, 12^2, 16^6, 18^4, $\frac{80}{3}^{108}$, 28^4, 38^4, 42^4, ∞^{64}
84	0^3	0^{21}, 8^7, 10^2, 12^2, 16^2, 18^2, 20^1, 28^1, 32^1, 36^1, 38^2, 40^1, 46^2, ∞^3	0^4, 8^7, 10^2, 18^2, 20^1, 28^1, 32^1, 36^1, 38^2, 40^1, 46^2, ∞^{24}	0^{22}, 8^{14}, 10^4, 12^2, 16^2, 18^4, 20^2, 28^{120}, 32^2, 36^2, 38^4, 40^2, 46^4, ∞^{69}

88	0^3	0^{22}, $\frac{28}{3}^6$, 11^4, 12^2, 16^2, 20^3, 30^2, 34^2, 42^2, 44^2, 50^2, ∞^3	0^4, $\frac{28}{3}^6$, 11^4, 12^2, 20^1, 30^2, 34^2, 42^2, 44^2, 50^2, ∞^{25}	0^{23}, $\frac{28}{3}^{12}$, 11^8, 12^4, 16^2, 20^4, $\frac{88}{3}^{129}$, 30^4, 34^4, 42^4, 44^4, 50^4, ∞^{74}
92	0^3	0^{23}, 4^4, $\frac{32}{3}^3$, 12^6, 13^4, 20^2, 32^3, 36^2, 44^4, 48^2, ∞^3	0^4, 4^1, $\frac{32}{3}^3$, 12^6, 13^4, 32^3, 36^2, 44^4, 48^2, ∞^{27}	0^{24}, 4^5, $\frac{32}{3}^6$, 12^{12}, 13^8, 20^2, $\frac{92}{3}^{141}$, 32^6, 36^4, 44^8, 48^4, ∞^{80}
96	0^3	0^{24}, $\frac{16}{3}^6$, 6^4, 12^1, 13^4, 14^6, 16^1, 28^1, 34^4, 46^6, ∞^3	0^4, $\frac{16}{3}^3$, 12^1, 13^4, 14^6, 16^1, 28^1, 34^4, 46^6, ∞^{30}	0^{25}, $\frac{16}{3}^9$, 6^4, 12^2, 13^8, 14^{12}, 16^2, 28^2, 32^{154}, 34^8, 46^{12}, ∞^{87}
100	0^4	0^{25}, $\frac{20}{3}^9$, 8^6, 12^1, 14^2, 15^4, 16^1, 18^2, 28^2, 32^1, 36^3, 48^4, 52^1, ∞^4	0^5, $\frac{20}{3}^6$, 14^2, 15^4, 16^1, 18^2, 28^2, 32^1, 36^3, 48^4, 52^1, ∞^{34}	0^{26}, $\frac{20}{3}^{15}$, 8^6, 12^1, 14^4, 15^8, 16^2, 18^4, 28^4, 32^2, $\frac{100}{3}^{168}$, 36^6, 48^8, 52^2, ∞^{95}
104	0^4	0^{26}, 8^{11}, 10^4, 12^2, 16^6, 18^2, 20^1, 28^1, 30^4, 38^2, 50^2, 52^2, 56^3, ∞^4	0^5, 8^{10}, 16^3, 18^2, 20^1, 28^1, 30^4, 38^2, 50^2, 52^2, 56^3, ∞^{35}	0^{27}, 8^{21}, 10^4, 12^2, 16^9, 18^4, 20^2, 28^2, 30^8, $\frac{104}{3}^{180}$, 38^4, 50^4, 52^4, 56^6, ∞^{101}
108	0^4	0^{27}, $\frac{28}{3}^{12}$, 12^5, 16^4, 18^2, 20^4, $\frac{88}{3}^3$, 32^2, 34^2, 40^1, 52^2, 54^2, 56^2, 60^3, ∞^4	0^5, $\frac{28}{3}^{12}$, 12^2, 18^2, 20^1, $\frac{88}{3}^3$, 32^2, 34^2, 40^1, 52^2, 54^2, 56^2, 60^3, ∞^{36}	0^{28}, $\frac{28}{3}^{24}$, 12^7, 16^4, 18^4, 20^5, $\frac{88}{3}^6$, 32^4, 34^4, 36^{193}, 40^2, 52^4, 54^4, 56^4, 60^6, ∞^{107}
112	0^4	0^{28}, 4^5, $\frac{32}{3}^{12}$, 13^4, 16^3, 20^5, $\frac{92}{3}^3$, 32^2, 36^4, 52^1, 54^4, 56^1, 58^2, 60^2, ∞^4	0^5, 4^1, $\frac{32}{3}^{12}$, 13^4, 20^1, $\frac{92}{3}^3$, 32^2, 36^4, 52^1, 54^4, 56^1, 58^2, 60^2, ∞^{38}	0^{29}, 4^6, $\frac{32}{3}^{24}$, 13^8, 16^3, 20^6, $\frac{92}{3}^6$, 32^4, 36^8, $\frac{112}{3}^{207}$, 52^2, 54^8, 56^2, 58^4, 60^4, ∞^{114}
116	0^4	0^{29}, $\frac{16}{3}^9$, 6^4, 12^{10}, 14^6, 20^3, 28^1, 32^1, 33^4, 34^2, 40^2, 54^2, 56^7, 60^1, ∞^4	0^5, $\frac{16}{3}^3$, 12^{10}, 14^6, 28^1, 32^1, 33^4, 34^2, 40^2, 54^2, 56^7, 60^1, ∞^{41}	0^{30}, $\frac{16}{3}^{12}$, 6^4, 12^{20}, 14^{12}, 20^3, 28^2, 32^2, 33^8, 34^4, $\frac{116}{3}^{222}$, 40^4, 54^4, 56^{14}, 60^2, ∞^{122}
120	0^4	0^{30}, $\frac{20}{3}^{12}$, 8^{10}, $\frac{40}{3}^6$, $\frac{44}{3}^3$, 15^4, 16^1, 28^2, 32^1, 34^2, 35^4, 36^1, 52^1, 56^3, 58^6, ∞^4	0^5, $\frac{20}{3}^6$, $\frac{40}{3}^6$, $\frac{44}{3}^3$, 15^4, 16^1, 28^2, 32^1, 34^2, 35^4, 36^1, 52^1, 56^3, 58^6, ∞^{45}	0^{31}, $\frac{20}{3}^{18}$, 8^{10}, $\frac{40}{3}^{12}$, $\frac{44}{3}^6$, 15^8, 16^2, 28^4, 32^2, 34^4, 35^8, 36^2, 40^{238}, 52^2, 56^6, 58^{12}, ∞^{131}
124	0^5	0^{31}, 8^{12}, 9^8, 10^8, $\frac{44}{3}^3$, 16^8, 20^1, 28^1, 30^4, 36^4, 38^2, 52^2, 58^2, 60^3, 66^2, ∞^5	0^6, 8^{10}, $\frac{44}{3}^3$, 16^6, 20^1, 28^1, 30^4, 36^4, 38^2, 52^2, 58^2, 60^3, 66^2, ∞^{50}	0^{32}, 8^{22}, 9^8, 10^8, $\frac{44}{3}^6$, 16^{14}, 20^2, 28^2, 30^8, 36^8, 38^4, $\frac{124}{3}^{255}$, 52^4, 58^4, 60^6, 66^4, ∞^{141}

| 128 | 0^5 | 0^{32}, $\frac{28}{3}^{15}$, 10^4, 12^8, 16^5, 17^4, 20^5, $\frac{88}{3}^3$, 32^6, 38^2, 40^1, 52^3, 60^1, 66^4, 70^4, ∞^5 | 0^6, $\frac{28}{3}^{15}$, 16^1, 17^4, 20^1, $\frac{88}{3}^3$, 32^6, 38^2, 40^1, 52^3, 60^1, 66^4, 70^4, ∞^{51} | 0^{33}, $\frac{28}{3}^{30}$, 10^4, 12^8, 16^6, 17^8, 20^6, $\frac{88}{3}^6$, 32^{12}, 38^4, 40^2, $\frac{128}{3}^{270}$, 52^6, 60^2, 66^8, 70^8, ∞^{148} |

Table 19: Slopes for $q = 5$, $i = 2$, type 2. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
3				$0^{\mathbf{1}}$
7				$\frac{4}{3}^{\mathbf{3}}$
11		$0^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{2}}$, $\frac{8}{3}^{\mathbf{3}}$, $\infty^{\mathbf{1}}$
15		$0^{\mathbf{1}}$, $4^{\mathbf{1}}$	$0^{\mathbf{1}}$, $4^{\mathbf{1}}$	$0^{\mathbf{2}}$, $4^{\mathbf{6}}$, $\infty^{\mathbf{2}}$
19		$0^{\mathbf{2}}$, $4^{\mathbf{1}}$	$0^{\mathbf{1}}$, $4^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{3}}$, $4^{\mathbf{2}}$, $\frac{16}{3}^{\mathbf{6}}$, $\infty^{\mathbf{4}}$
23		$0^{\mathbf{3}}$, $4^{\mathbf{1}}$	$0^{\mathbf{1}}$, $4^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{4}}$, $4^{\mathbf{2}}$, $\frac{20}{3}^{\mathbf{9}}$, $\infty^{\mathbf{6}}$
27		$0^{\mathbf{3}}$, $2^{\mathbf{2}}$	$2^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{3}}$, $2^{\mathbf{4}}$, $8^{\mathbf{13}}$, $\infty^{\mathbf{8}}$
31		$0^{\mathbf{5}}$, $4^{\mathbf{1}}$	$0^{\mathbf{1}}$, $4^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{6}}$, $4^{\mathbf{2}}$, $\frac{28}{3}^{\mathbf{18}}$, $\infty^{\mathbf{10}}$
35		$0^{\mathbf{4}}$, $2^{\mathbf{2}}$, $16^{\mathbf{1}}$, $24^{\mathbf{1}}$	$0^{\mathbf{1}}$, $2^{\mathbf{2}}$, $24^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{5}}$, $2^{\mathbf{4}}$, $\frac{32}{3}^{\mathbf{21}}$, $16^{\mathbf{1}}$, $24^{\mathbf{2}}$, $\infty^{\mathbf{12}}$
39		$0^{\mathbf{5}}$, $2^{\mathbf{2}}$, $4^{\mathbf{1}}$, $12^{\mathbf{1}}$, $24^{\mathbf{1}}$	$0^{\mathbf{1}}$, $2^{\mathbf{2}}$, $4^{\mathbf{1}}$, $24^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{6}}$, $2^{\mathbf{4}}$, $4^{\mathbf{2}}$, $12^{\mathbf{26}}$, $24^{\mathbf{2}}$, $\infty^{\mathbf{15}}$
43		$0^{\mathbf{6}}$, $2^{\mathbf{2}}$, $4^{\mathbf{1}}$, $8^{\mathbf{1}}$, $24^{\mathbf{2}}$	$0^{\mathbf{1}}$, $2^{\mathbf{2}}$, $4^{\mathbf{1}}$, $24^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{7}}$, $2^{\mathbf{4}}$, $4^{\mathbf{2}}$, $8^{\mathbf{1}}$, $\frac{40}{3}^{\mathbf{30}}$, $24^{\mathbf{3}}$, $\infty^{\mathbf{19}}$
47		$0^{\mathbf{6}}$, $\frac{4}{3}^{\mathbf{3}}$, $4^{\mathbf{2}}$, $24^{\mathbf{3}}$	$\frac{4}{3}^{\mathbf{3}}$, $4^{\mathbf{1}}$, $24^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{6}}$, $\frac{4}{3}^{\mathbf{6}}$, $4^{\mathbf{3}}$, $\frac{44}{3}^{\mathbf{36}}$, $24^{\mathbf{4}}$, $\infty^{\mathbf{23}}$
51		$0^{\mathbf{9}}$, $\frac{8}{3}^{\mathbf{3}}$, $24^{\mathbf{4}}$	$0^{\mathbf{1}}$, $\frac{8}{3}^{\mathbf{3}}$, $24^{\mathbf{1}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{10}}$, $\frac{8}{3}^{\mathbf{6}}$, $16^{\mathbf{43}}$, $24^{\mathbf{5}}$, $\infty^{\mathbf{27}}$
55		$0^{\mathbf{7}}$, $2^{\mathbf{2}}$, $4^{\mathbf{5}}$, $24^{\mathbf{3}}$, $28^{\mathbf{1}}$	$0^{\mathbf{1}}$, $2^{\mathbf{2}}$, $4^{\mathbf{1}}$, $24^{\mathbf{1}}$, $\infty^{\mathbf{13}}$	$0^{\mathbf{8}}$, $2^{\mathbf{4}}$, $4^{\mathbf{6}}$, $\frac{52}{3}^{\mathbf{51}}$, $24^{\mathbf{4}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{31}}$
59	$0^{\mathbf{1}}$	$0^{\mathbf{8}}$, $2^{\mathbf{2}}$, $4^{\mathbf{5}}$, $24^{\mathbf{4}}$, $40^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{2}}$, $2^{\mathbf{2}}$, $4^{\mathbf{1}}$, $24^{\mathbf{2}}$, $\infty^{\mathbf{14}}$	$0^{\mathbf{9}}$, $2^{\mathbf{4}}$, $4^{\mathbf{6}}$, $\frac{56}{3}^{\mathbf{60}}$, $24^{\mathbf{6}}$, $40^{\mathbf{1}}$, $\infty^{\mathbf{34}}$
63	$0^{\mathbf{1}}$	$0^{\mathbf{9}}$, $2^{\mathbf{2}}$, $4^{\mathbf{4}}$, $6^{\mathbf{2}}$, $8^{\mathbf{2}}$, $12^{\mathbf{1}}$, $24^{\mathbf{2}}$, $36^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{2}}$, $2^{\mathbf{2}}$, $4^{\mathbf{1}}$, $6^{\mathbf{2}}$, $24^{\mathbf{2}}$, $\infty^{\mathbf{15}}$	$0^{\mathbf{10}}$, $2^{\mathbf{4}}$, $4^{\mathbf{5}}$, $6^{\mathbf{4}}$, $8^{\mathbf{2}}$, $12^{\mathbf{1}}$, $20^{\mathbf{67}}$, $24^{\mathbf{4}}$, $36^{\mathbf{1}}$, $\infty^{\mathbf{38}}$
67	$0^{\mathbf{1}}$	$0^{\mathbf{9}}$, $\frac{4}{3}^{\mathbf{3}}$, $2^{\mathbf{4}}$, $4^{\mathbf{3}}$, $8^{\mathbf{3}}$, $24^{\mathbf{2}}$, $32^{\mathbf{1}}$, $48^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\frac{4}{3}^{\mathbf{3}}$, $4^{\mathbf{1}}$, $8^{\mathbf{3}}$, $24^{\mathbf{2}}$, $\infty^{\mathbf{17}}$	$0^{\mathbf{9}}$, $\frac{4}{3}^{\mathbf{6}}$, $2^{\mathbf{4}}$, $4^{\mathbf{4}}$, $8^{\mathbf{6}}$, $\frac{64}{3}^{\mathbf{75}}$, $24^{\mathbf{4}}$, $32^{\mathbf{1}}$, $48^{\mathbf{1}}$, $\infty^{\mathbf{43}}$
71	$0^{\mathbf{1}}$	$0^{\mathbf{13}}$, $\frac{8}{3}^{\mathbf{3}}$, $4^{\mathbf{5}}$, $10^{\mathbf{4}}$, $24^{\mathbf{2}}$, $44^{\mathbf{1}}$, $52^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{2}}$, $\frac{8}{3}^{\mathbf{3}}$, $10^{\mathbf{4}}$, $24^{\mathbf{2}}$, $\infty^{\mathbf{19}}$	$0^{\mathbf{14}}$, $\frac{8}{3}^{\mathbf{6}}$, $4^{\mathbf{5}}$, $10^{\mathbf{8}}$, $\frac{68}{3}^{\mathbf{84}}$, $24^{\mathbf{4}}$, $44^{\mathbf{1}}$, $52^{\mathbf{1}}$, $\infty^{\mathbf{48}}$
75	$4^{\mathbf{1}}$	$0^{\mathbf{10}}$, $2^{\mathbf{6}}$, $4^{\mathbf{7}}$, $6^{\mathbf{2}}$, $12^{\mathbf{3}}$, $24^{\mathbf{2}}$, $44^{\mathbf{2}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $2^{\mathbf{2}}$, $4^{\mathbf{2}}$, $6^{\mathbf{2}}$, $12^{\mathbf{3}}$, $24^{\mathbf{2}}$, $\infty^{\mathbf{21}}$	$0^{\mathbf{11}}$, $2^{\mathbf{8}}$, $4^{\mathbf{8}}$, $6^{\mathbf{4}}$, $12^{\mathbf{6}}$, $24^{\mathbf{98}}$, $44^{\mathbf{2}}$, $\infty^{\mathbf{53}}$
79	$0^{\mathbf{1}}$	$0^{\mathbf{11}}$, $2^{\mathbf{6}}$, $4^{\mathbf{8}}$, $6^{\mathbf{2}}$, $14^{\mathbf{4}}$, $24^{\mathbf{2}}$, $44^{\mathbf{2}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{2}}$, $2^{\mathbf{2}}$, $4^{\mathbf{1}}$, $6^{\mathbf{2}}$, $14^{\mathbf{4}}$, $24^{\mathbf{2}}$, $\infty^{\mathbf{23}}$	$0^{\mathbf{12}}$, $2^{\mathbf{8}}$, $4^{\mathbf{9}}$, $6^{\mathbf{4}}$, $14^{\mathbf{8}}$, $24^{\mathbf{4}}$, $\frac{76}{3}^{\mathbf{105}}$, $44^{\mathbf{2}}$, $\infty^{\mathbf{58}}$
83	$0^{\mathbf{2}}$	$0^{\mathbf{12}}$, $2^{\mathbf{6}}$, $4^{\mathbf{9}}$, $6^{\mathbf{2}}$, $8^{\mathbf{1}}$, $16^{\mathbf{3}}$, $24^{\mathbf{3}}$, $40^{\mathbf{1}}$, $56^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{3}}$, $2^{\mathbf{2}}$, $4^{\mathbf{1}}$, $6^{\mathbf{2}}$, $8^{\mathbf{1}}$, $16^{\mathbf{3}}$, $24^{\mathbf{3}}$, $\infty^{\mathbf{25}}$	$0^{\mathbf{13}}$, $2^{\mathbf{8}}$, $4^{\mathbf{10}}$, $6^{\mathbf{4}}$, $8^{\mathbf{2}}$, $16^{\mathbf{6}}$, $24^{\mathbf{6}}$, $\frac{80}{3}^{\mathbf{117}}$, $40^{\mathbf{1}}$, $56^{\mathbf{1}}$, $\infty^{\mathbf{63}}$

87	0^2	0^{12}, $\frac{4}{3}^6$, 2^4, 4^7, 7^4, 8^1, 12^1, 18^2, 24^3, 28^1, 52^1, ∞^2	0^2, $\frac{4}{3}^3$, 4^1, 7^4, 8^1, 12^1, 18^2, 24^3, 28^1, ∞^{26}	0^{12}, $\frac{4}{3}^9$, 2^4, 4^8, 7^8, 8^2, 12^2, 18^4, 24^6, 28^{129}, 52^1, ∞^{68}
91	0^2	0^{17}, $\frac{8}{3}^6$, 4^8, 8^2, $\frac{28}{3}^3$, 10^2, 16^1, 20^1, 24^3, 30^2, 72^1, ∞^2	0^3, $\frac{8}{3}^3$, 8^2, $\frac{28}{3}^3$, 10^2, 16^1, 20^1, 24^3, 30^2, ∞^{28}	0^{18}, $\frac{8}{3}^9$, 4^8, 8^4, $\frac{28}{3}^6$, 10^4, 16^2, 20^2, 24^6, $\frac{88}{3}^{138}$, 30^4, 72^1, ∞^{74}
95	0^1, 4^1	0^{13}, 2^{10}, 4^{10}, 6^2, 10^2, $\frac{32}{3}^3$, 12^2, 20^1, 24^3, 32^3, 68^1, ∞^2	0^2, 2^2, 4^2, 6^2, 10^2, $\frac{32}{3}^3$, 12^2, 20^1, 24^3, 32^3, ∞^{30}	0^{14}, 2^{12}, 4^{11}, 6^4, 10^4, $\frac{32}{3}^6$, 12^4, 20^2, 24^6, $\frac{92}{3}^{150}$, 32^6, 68^1, ∞^{80}
99	0^1, 4^1	0^{14}, 2^{10}, 4^{11}, 6^2, 8^2, 12^1, 13^4, 14^2, 24^3, 34^4, 64^1, ∞^2	0^2, 2^2, 4^2, 6^2, 8^2, 12^1, 13^4, 14^2, 24^3, 34^4, ∞^{32}	0^{15}, 2^{12}, 4^{12}, 6^4, 8^4, 12^2, 13^8, 14^4, 24^6, 32^{163}, 34^8, 64^1, ∞^{86}
103	0^2	0^{15}, 2^{10}, 4^{12}, 6^2, 8^3, 14^2, 15^4, 16^1, 24^3, 36^3, 44^2, 60^1, ∞^2	0^3, 2^2, 4^1, 6^2, 8^3, 14^2, 15^4, 16^1, 24^3, 36^3, 44^1, ∞^{35}	0^{16}, 2^{12}, 4^{13}, 6^4, 8^6, 14^4, 15^8, 16^2, 24^6, $\frac{100}{3}^{177}$, 36^6, 44^3, 60^1, ∞^{93}
107	0^3	0^{15}, $\frac{4}{3}^9$, 2^4, 4^{11}, 7^4, 8^2, 10^2, 16^3, 18^2, 24^4, 28^1, 28^1, 38^2, 40^1, 44^1, 72^1, ∞^3	0^3, $\frac{4}{3}^3$, 4^1, 7^4, 8^1, 10^2, 16^3, 18^2, 24^4, 28^1, 38^2, 44^1, ∞^{38}	0^{15}, $\frac{4}{3}^{12}$, 2^4, 4^{12}, 7^8, 8^3, 10^4, 16^6, 18^4, 24^8, 28^2, $\frac{104}{3}^{192}$, 38^4, 40^1, 44^2, 72^1, ∞^{100}
111	0^3	0^{21}, $\frac{8}{3}^9$, 4^{11}, 8^6, $\frac{28}{3}^3$, 12^2, 16^1, 18^2, 20^1, 24^4, $\frac{88}{3}^3$, 36^1, 40^1, 44^1, 52^1, ∞^3	0^4, $\frac{8}{3}^3$, 8^6, $\frac{28}{3}^3$, 12^1, 16^1, 18^2, 20^1, 24^4, $\frac{88}{3}^3$, 40^1, 44^1, 52^1, ∞^{39}	0^{22}, $\frac{8}{3}^{12}$, 4^{11}, 8^{12}, $\frac{28}{3}^6$, 12^3, 16^2, 18^4, 20^2, 24^8, $\frac{88}{3}^6$, 36^{206}, 40^2, 44^2, 52^2, ∞^{106}
115	0^2, 4^1	0^{16}, 2^{12}, 4^{17}, 9^4, $\frac{32}{3}^6$, 16^2, 20^2, 24^4, $\frac{92}{3}^3$, 32^3, 44^1, 52^1, 56^1, ∞^3	0^3, 4^6, 9^4, $\frac{32}{3}^6$, 16^1, 20^2, 24^4, $\frac{92}{3}^3$, 32^2, 44^1, 52^1, 56^1, ∞^{41}	0^{17}, 2^{12}, 4^{22}, 9^8, $\frac{32}{3}^{12}$, 16^3, 20^4, 24^8, $\frac{92}{3}^6$, 32^5, $\frac{112}{3}^{219}$, 44^2, 52^2, 56^2, ∞^{113}
119	0^2, 4^1	0^{17}, 2^{12}, 4^{14}, $\frac{16}{3}^6$, 10^2, 12^7, 14^2, 20^2, 24^4, 28^1, 32^1, 33^4, 34^2, 54^2, 60^1, ∞^3	0^3, 4^2, $\frac{16}{3}^6$, 10^2, 12^7, 14^2, 20^1, 24^4, 32^1, 33^4, 34^2, 54^2, 60^1, ∞^{43}	0^{18}, 2^{12}, 4^{15}, $\frac{16}{3}^{12}$, 10^4, 12^{14}, 14^4, 20^3, 24^8, 28^1, 32^2, 33^8, 34^4, $\frac{116}{3}^{234}$, 54^4, 60^2, ∞^{120}
123	0^2, 4^1	0^{18}, 2^{12}, 4^{15}, $\frac{20}{3}^9$, 8^2, $\frac{40}{3}^6$, 15^4, 24^4, 34^2, 35^4, 36^1, 44^1, 56^3, 64^1, ∞^3	0^3, 4^2, $\frac{20}{3}^9$, $\frac{40}{3}^6$, 15^4, 24^4, 34^2, 35^4, 36^1, 44^1, 56^3, ∞^{46}	0^{19}, 2^{12}, 4^{16}, $\frac{20}{3}^{18}$, 8^2, $\frac{40}{3}^{12}$, 15^8, 24^8, 34^4, 35^8, 36^2, 40^{250}, 44^2, 56^6, 64^1, ∞^{128}

| 127 | $0^{\mathbf{3}}$ | $0^{\mathbf{18}}$, $\frac{4}{3}^{\mathbf{9}}$, $2^{\mathbf{6}}$, $4^{\mathbf{14}}$, $8^{\mathbf{12}}$, $12^{\mathbf{2}}$, $\frac{44}{3}^{\mathbf{3}}$, $16^{\mathbf{6}}$, $20^{\mathbf{1}}$, $24^{\mathbf{3}}$, $28^{\mathbf{1}}$, $36^{\mathbf{3}}$, $38^{\mathbf{2}}$, $44^{\mathbf{2}}$, $58^{\mathbf{2}}$, $64^{\mathbf{3}}$, $\infty^{\mathbf{3}}$ | $0^{\mathbf{3}}$, $2^{\mathbf{2}}$, $8^{\mathbf{10}}$, $12^{\mathbf{2}}$, $\frac{44}{3}^{\mathbf{3}}$, $16^{\mathbf{6}}$, $24^{\mathbf{3}}$, $28^{\mathbf{1}}$, $36^{\mathbf{3}}$, $38^{\mathbf{2}}$, $44^{\mathbf{2}}$, $58^{\mathbf{2}}$, $64^{\mathbf{1}}$, $\infty^{\mathbf{50}}$ | $0^{\mathbf{18}}$, $\frac{4}{3}^{\mathbf{9}}$, $2^{\mathbf{8}}$, $4^{\mathbf{14}}$, $8^{\mathbf{22}}$, $12^{\mathbf{4}}$, $\frac{44}{3}^{\mathbf{6}}$, $16^{\mathbf{12}}$, $20^{\mathbf{1}}$, $24^{\mathbf{6}}$, $28^{\mathbf{2}}$, $36^{\mathbf{6}}$, $38^{\mathbf{4}}$, $\frac{124}{3}^{\mathbf{267}}$, $44^{\mathbf{4}}$, $58^{\mathbf{4}}$, $64^{\mathbf{4}}$, $\infty^{\mathbf{137}}$ |

Table 20: Slopes for $q = 5$, $i = 2$, type 3. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
2				
6				0^1
10				$\frac{4}{3}^3$
14				$\frac{8}{3}^6$
18		0^1	0^1	0^2, 4^7, ∞^1
22		0^1, 4^1	0^1, 4^1	0^2, 4^2, $\frac{16}{3}^9$, ∞^2
26		0^1, 4^1, 8^1	0^1, 4^1, 8^1	0^2, 4^2, $\frac{20}{3}^{12}$, 8^2, ∞^3
30		0^1, 2^2, 8^1	2^2, 8^1, ∞^1	0^1, 2^4, 8^{18}, ∞^5
34		0^2, 4^3	4^3, ∞^2	0^2, 4^6, $\frac{28}{3}^{21}$, ∞^7
38		0^4, 6^2	0^1, 6^2, ∞^3	0^5, 6^4, $\frac{32}{3}^{27}$, ∞^9
42		0^3, 2^2, 8^1, 12^1, 24^1	0^1, 2^2, 8^1, 24^1, ∞^3	0^4, 2^4, 8^2, 12^{32}, 24^2, ∞^{11}
46		0^2, 2^2, 4^1, 8^2, 16^1, 24^1, 28^1	0^1, 2^2, 4^1, 8^1, 24^1, 28^1, ∞^3	0^3, 2^4, 4^2, 8^3, $\frac{40}{3}^{36}$, 16^1, 24^2, 28^2, ∞^{13}
50		0^2, $\frac{4}{3}^3$, 4^2, 8^2, 12^1, 24^1, 28^1	$\frac{4}{3}^3$, 4^1, 8^2, 24^1, 28^1, ∞^4	0^2, $\frac{4}{3}^6$, 4^3, 8^4, 12^1, $\frac{44}{3}^{42}$, 24^2, 28^2, ∞^{16}
54		0^4, $\frac{8}{3}^3$, 4^2, 8^2, 24^2, 28^1	$\frac{8}{3}^3$, 4^2, 8^1, 24^1, 28^1, ∞^6	0^4, $\frac{8}{3}^6$, 4^4, 8^3, 16^{49}, 24^3, 28^2, ∞^{20}
58		0^7, 4^1, 5^4, 24^2, 26^2	0^1, 4^1, 5^4, 26^2, ∞^8	0^8, 4^2, 5^8, $\frac{52}{3}^{57}$, 24^2, 26^4, ∞^{24}
62		0^5, 2^2, 4^4, 6^2, 8^1, 24^3, 28^1	0^1, 2^2, 6^2, 8^1, 24^1, 28^1, ∞^{10}	0^6, 2^4, 4^4, 6^4, 8^2, $\frac{56}{3}^{66}$, 24^4, 28^2, ∞^{28}
66		0^3, 2^2, 4^7, 8^1, 16^2, 20^1, 24^2, 36^1, 38^2	0^1, 2^2, 4^3, 8^1, 24^2, 38^2, ∞^{10}	0^4, 2^4, 4^{10}, 8^2, 16^2, 20^{74}, 24^4, 36^1, 38^4, ∞^{31}
70		0^3, $\frac{4}{3}^3$, 2^4, 4^3, 6^2, 12^2, 24^2, 28^1, 32^1, 38^2, 40^1	$\frac{4}{3}^3$, 4^3, 6^2, 24^2, 28^1, 38^2, ∞^{11}	0^3, $\frac{4}{3}^6$, 2^4, 4^6, 6^4, 12^2, $\frac{64}{3}^{81}$, 24^4, 28^2, 32^1, 38^4, 40^1, ∞^{35}
74		0^6, $\frac{8}{3}^6$, 4^3, 6^2, 8^3, 24^2, 28^1, 36^1, 38^2, 44^1	$\frac{8}{3}^6$, 6^2, 8^1, 24^2, 28^1, 38^2, ∞^{13}	0^6, $\frac{8}{3}^{12}$, 4^3, 6^4, 8^4, $\frac{68}{3}^{90}$, 24^4, 28^2, 36^1, 38^4, 44^1, ∞^{40}
78		0^{10}, 4^9, 8^3, 24^1, 28^2, 36^2, 44^2, 48^1	0^1, 4^7, 8^1, 24^1, 28^2, 36^2, ∞^{16}	0^{11}, 4^{16}, 8^4, 24^{102}, 28^4, 36^4, 44^2, 48^1, ∞^{46}

82		0^7, 2^6, 4^5, $\frac{16}{3}^6$, 24^1, 26^2, 38^2, 44^2, 48^2	0^1, 2^2, $\frac{16}{3}^6$, 24^1, 26^2, 38^2, ∞^{19}	0^8, 2^8, 4^5, $\frac{16}{3}^{12}$, 24^2, $\frac{76}{3}^{111}$, 26^4, 38^4, 44^2, 48^2, ∞^{52}
86		0^4, 2^6, 4^7, $\frac{20}{3}^3$, 8^2, 16^4, $\frac{56}{3}^3$, 24^2, 28^2, 48^2, 56^1	0^1, 2^2, 4^3, $\frac{20}{3}^3$, 24^2, 28^2, 48^1, ∞^{22}	0^5, 2^8, 4^{10}, $\frac{20}{3}^6$, 8^2, 16^4, $\frac{56}{3}^3$, 24^4, $\frac{80}{3}^{123}$, 28^4, 48^3, 56^1, ∞^{58}
90	0^1	0^4, $\frac{4}{3}^6$, 2^4, 4^5, 6^6, 8^1, 12^1, 20^1, 24^2, 26^2, 28^1, 44^1, 48^2, 52^1, 60^2, ∞^1	0^1, $\frac{4}{3}^3$, 4^3, 6^2, 8^1, 24^2, 26^2, 28^1, 48^2, ∞^{23}	0^4, $\frac{4}{3}^9$, 2^4, 4^8, 6^8, 8^2, 12^1, 20^1, 24^4, 26^4, 28^{138}, 44^1, 48^4, 52^1, 60^2, ∞^{62}
94	0^1	0^8, $\frac{8}{3}^9$, 4^8, 6^2, 8^4, 16^1, 24^2, 26^2, 28^2, 48^2, 56^2, 64^1, ∞^1	0^1, $\frac{8}{3}^6$, 6^2, 8^3, 24^2, 26^2, 28^2, 48^2, ∞^{24}	0^8, $\frac{8}{3}^{15}$, 4^8, 6^4, 8^7, 16^1, 24^4, 26^4, 28^4, $\frac{88}{3}^{147}$, 48^4, 56^2, 64^1, ∞^{67}
98	0^1	0^{13}, 4^{12}, 6^4, 8^3, 10^4, 24^1, 26^4, 28^2, 48^2, 60^1, 68^1, ∞^1	0^2, 4^7, 8^1, 10^4, 24^1, 26^4, 28^1, 48^2, ∞^{26}	0^{14}, 4^{19}, 6^4, 8^4, 10^8, 24^2, 26^8, 28^3, $\frac{92}{3}^{159}$, 48^4, 60^1, 68^1, ∞^{73}
102	4^1	0^9, 2^{10}, 4^6, $\frac{16}{3}^6$, 8^5, 12^3, 24^1, $\frac{76}{3}^3$, 28^4, 48^2, 64^1, 72^1, ∞^1	0^1, 2^2, 4^1, $\frac{16}{3}^6$, 8^2, 12^3, 24^1, $\frac{76}{3}^3$, 28^2, 48^2, ∞^{29}	0^{10}, 2^{12}, 4^6, $\frac{16}{3}^{12}$, 8^7, 12^6, 24^2, $\frac{76}{3}^6$, 28^6, 32^{172}, 48^4, 64^1, 72^1, ∞^{80}
106	8^1	0^5, 2^{10}, 4^{11}, $\frac{20}{3}^3$, 8^{10}, 10^2, 14^2, 20^1, 24^2, $\frac{80}{3}^3$, 28^2, 48^2, 60^1, 68^1, ∞^1	0^1, 2^2, 4^3, $\frac{20}{3}^3$, 8^3, 10^2, 14^2, 24^2, $\frac{80}{3}^3$, 28^1, 48^2, ∞^{32}	0^6, 2^{12}, 4^{14}, $\frac{20}{3}^6$, 8^{12}, 10^4, 14^4, 20^1, 24^4, $\frac{80}{3}^6$, 28^3, $\frac{100}{3}^{186}$, 48^4, 60^1, 68^1, ∞^{87}
110	0^1	0^5, $\frac{4}{3}^9$, 2^4, 4^7, 6^{10}, 8^5, 9^4, 16^3, 24^3, 26^2, 28^2, 32^1, 48^2, 64^1, 72^1, ∞^1	0^1, $\frac{4}{3}^3$, 4^3, 6^2, 8^1, 9^4, 16^3, 24^2, 26^2, 28^2, 48^2, ∞^{35}	0^5, $\frac{4}{3}^{12}$, 2^4, 4^{10}, 6^{12}, 8^6, 9^8, 16^6, 24^5, 26^4, 28^4, 32^1, $\frac{104}{3}^{201}$, 48^4, 64^1, 72^1, ∞^{94}
114	0^2	0^{10}, $\frac{8}{3}^{12}$, 4^{13}, 6^2, 8^7, 10^2, 12^1, 18^2, 24^3, 26^2, 28^3, 44^1, 48^3, 76^2, ∞^2	0^2, $\frac{8}{3}^6$, 6^2, 8^3, 10^2, 12^1, 18^2, 24^3, 26^2, 28^2, 48^3, ∞^{37}	0^{10}, $\frac{8}{3}^{18}$, 4^{13}, 6^4, 8^{10}, 10^4, 12^2, 18^4, 24^6, 26^4, 28^5, 36^{217}, 44^1, 48^6, 76^2, ∞^{100}
118	0^2	0^{16}, 4^{15}, 5^8, 6^4, 8^2, 9^4, 10^2, 12^1, 16^1, 20^1, 24^2, 26^4, 28^2, 32^1, 40^1, 48^3, 80^1, ∞^2	0^3, 4^7, 8^1, 9^4, 10^2, 12^1, 16^1, 20^1, 24^2, 26^4, 28^2, 32^1, 48^3, ∞^{38}	0^{17}, 4^{22}, 5^8, 6^4, 8^3, 9^8, 10^4, 12^2, 16^2, 20^2, 24^4, 26^8, 28^4, 32^2, $\frac{112}{3}^{231}$, 40^1, 48^6, 80^1, ∞^{106}

122	0^1, 4^1	0^{11}, 2^{12}, 4^8, $\frac{16}{3}^9$, 6^4, 8^6, 10^2, 11^4, 12^1, 16^1, 20^1, 24^2, $\frac{76}{3}^3$, 28^3, 32^1, 36^1, 48^3, 52^1, ∞^2	0^2, 4^2, $\frac{16}{3}^9$, 10^2, 11^4, 12^1, 16^1, 20^1, 24^2, $\frac{76}{3}^3$, 28^3, 32^1, 36^1, 48^3, ∞^{40}	0^{12}, 2^{12}, 4^9, $\frac{16}{3}^{18}$, 6^4, 8^6, 10^4, 11^8, 12^2, 16^2, 20^2, 24^4, $\frac{76}{3}^6$, 28^6, 32^2, 36^2, $\frac{116}{3}^{246}$, 48^6, 52^1, ∞^{113}
126	4^1, 8^1	0^6, 2^{12}, 4^{15}, $\frac{20}{3}^{12}$, 8^{12}, 12^2, $\frac{40}{3}^3$, 20^1, 24^3, $\frac{80}{3}^3$, 28^2, 34^2, 40^1, 48^4, ∞^2	0^1, 4^2, $\frac{20}{3}^{12}$, 8^2, 12^2, $\frac{40}{3}^3$, 20^1, 24^3, $\frac{80}{3}^3$, 28^2, 34^2, 40^1, 48^3, ∞^{43}	0^7, 2^{12}, 4^{16}, $\frac{20}{3}^{24}$, 8^{13}, 12^4, $\frac{40}{3}^6$, 20^2, 24^6, $\frac{80}{3}^6$, 28^4, 34^4, 40^{264}, 48^7, ∞^{121}
130	0^1, 8^1	0^6, $\frac{4}{3}^9$, 2^6, 4^{10}, 6^8, 8^{22}, 12^2, $\frac{44}{3}^3$, 16^2, 24^1, 26^4, 28^2, 36^4, 44^1, 48^3, ∞^2	0^1, 2^2, 8^{15}, 12^2, $\frac{44}{3}^3$, 16^2, 24^1, 26^4, 28^2, 36^4, 48^3, ∞^{46}	0^6, $\frac{4}{3}^9$, 2^8, 4^{10}, 6^8, 8^{36}, 12^4, $\frac{44}{3}^6$, 16^4, 24^2, 26^8, 28^4, 36^8, $\frac{124}{3}^{279}$, 44^1, 48^6, ∞^{129}

5 $q = 7$.

5.1 $i = 1$.

Table 21: Slopes for $q = 7$, $i = 1$, type 0. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
3				
9				
15				0^1
21				4^3
27				8^6
33				12^{10}
39				16^{15}
45				20^{21}
51		∞^1	0^1	0^1, 24^{25}, ∞^2
57		∞^2	0^1, 12^1	0^1, 12^1, 28^{30}, ∞^4
63		∞^3	6^2, 24^1	6^2, 24^1, 32^{36}, ∞^6
69		∞^4	12^3, 36^1	12^3, 36^{44}, ∞^8
75		∞^5	18^4, 48^1	18^4, 40^{51}, 48^1, ∞^{10}
81		∞^6	24^5, 60^1	24^5, 44^{60}, 60^1, ∞^{12}
87		36^1, ∞^6	30^6, 36^1	30^6, 36^2, 48^{70}, ∞^{13}
93		39^2, ∞^6	0^1, 36^5, 39^2	0^1, 36^5, 39^4, 52^{81}, ∞^{14}
99		42^1, 48^1, ∞^8	0^1, 6^2, 42^5, 48^1, 96^1	0^1, 6^2, 42^6, 48^2, 56^{90}, 96^1, ∞^{18}
105		48^1, 54^1, ∞^{10}	4^3, 12^1, 24^1, 48^4, 54^1, 96^1, 108^1	4^3, 12^1, 24^1, 48^5, 54^2, 60^{100}, 96^1, 108^1, ∞^{22}
111		54^1, 60^1, ∞^{12}	8^3, 12^2, 24^1, 36^1, 54^3, 60^1, 96^1, 108^1, 120^1	8^3, 12^2, 24^1, 36^1, 54^4, 60^2, 64^{111}, 96^1, 108^1, 120^1, ∞^{26}
117		60^1, 66^1, ∞^{14}	12^1, 15^4, 18^2, 36^1, 48^1, 60^2, 66^1, 102^2, 120^1, 132^1	12^1, 15^4, 18^2, 36^1, 48^1, 60^3, 66^2, 68^{123}, 102^2, 120^1, 132^1, ∞^{30}
123		66^1, 72^1, ∞^{16}	18^2, 21^4, 24^3, 48^1, 60^1, 66^1, 72^1, 108^3, 132^1, 144^1	18^2, 21^4, 24^3, 48^1, 60^1, 66^2, 72^{138}, 108^3, 132^1, 144^1, ∞^{34}

129		57^2, 72^1, ∞^{17}	24^3, 27^4, 30^4, 57^2, 60^1, 72^1, 114^4, 144^1	24^3, 27^4, 30^4, 57^4, 60^1, 72^2, 76^{150}, 114^4, 144^1, ∞^{37}
135		60^4, 84^1, ∞^{17}	0^1, 30^4, 33^4, 36^3, 60^4, 84^1, 120^5	0^1, 30^4, 33^4, 36^3, 60^8, 80^{165}, 84^2, 120^5, ∞^{39}
141		63^2, 66^4, 84^1, ∞^{17}	0^1, 6^2, 36^5, 42^4, 63^2, 66^4, 84^1, 96^1, 126^4	0^1, 6^2, 36^5, 42^4, 63^4, 66^8, 84^{183}, 96^1, 126^4, ∞^{41}
147		$\frac{135}{2}^4$, 75^2, 96^1, ∞^{20}	4^3, 12^3, 42^4, 48^3, $\frac{135}{2}^4$, 75^2, 96^3, 132^3, 150^2	4^3, 12^3, 42^4, 48^3, $\frac{135}{2}^8$, 75^4, 88^{195}, 96^4, 132^3, 150^2, ∞^{47}

Table 22: Slopes for $q = 7$, $i = 1$, type 1. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
0				0^1
6		∞^1	0^1	0^1, ∞^2
12		6^1, ∞^1	0^1, 6^1	0^1, 6^2, ∞^3
18		9^2, ∞^1	0^1, 9^2	0^1, 9^4, 12^1, ∞^4
24		12^3, ∞^1	0^1, 12^3	0^1, 12^6, 16^3, ∞^5
30		15^4, ∞^1	0^1, 15^4	0^1, 15^8, 20^6, ∞^6
36		18^5, ∞^1	0^1, 18^5	0^1, 18^{10}, 24^{10}, ∞^7
42		21^6, ∞^1	0^1, 21^6	0^1, 21^{12}, 28^{15}, ∞^8
48		24^7, ∞^1	0^1, 24^7	0^1, 24^{14}, 32^{21}, ∞^9
54	6^1	6^1, 27^6, ∞^3	0^1, 6^2, 27^6, ∞^1	0^1, 6^2, 27^{12}, 36^{28}, ∞^{12}
60	12^1	12^1, 30^7, ∞^4	0^1, 12^3, 30^7, ∞^1	0^1, 12^3, 30^{14}, 40^{33}, ∞^{15}
66	18^1	18^1, 33^8, ∞^5	0^1, 18^4, 33^8, ∞^1	0^1, 18^4, 33^{16}, 44^{39}, ∞^{18}
72	24^1	24^1, 36^9, ∞^6	0^1, 24^5, 36^9, ∞^1	0^1, 24^5, 36^{18}, 48^{46}, ∞^{21}
78	30^1	30^1, 39^{10}, ∞^7	0^1, 30^6, 39^{10}, ∞^1	0^1, 30^6, 39^{20}, 52^{54}, ∞^{24}
84	36^1	36^1, 42^{11}, ∞^8	0^1, 36^7, 42^{11}, ∞^1	0^1, 36^7, 42^{22}, 56^{63}, ∞^{27}
90	42^1	42^1, 45^{12}, ∞^9	0^1, 42^8, 45^{12}, ∞^1	0^1, 42^8, 45^{24}, 60^{73}, ∞^{30}
96	6^1	6^1, 48^{13}, ∞^{10}	0^1, 6^2, 48^{20}, ∞^1	0^1, 6^2, 48^{33}, 64^{84}, ∞^{33}
102	9^2	9^2, 51^{12}, 54^1, ∞^{12}	0^1, 9^4, 12^1, 51^{12}, 54^7, ∞^2	0^1, 9^4, 12^1, 51^{24}, 54^8, 68^{96}, ∞^{37}
108	12^1, 18^1	12^1, 18^1, 54^{13}, 60^1, ∞^{14}	0^1, 12^2, 16^3, 18^2, 54^{13}, 60^6, 108^1, ∞^2	0^1, 12^2, 16^3, 18^2, 54^{26}, 60^7, 72^{106}, 108^1, ∞^{42}
114	18^1, 24^1	18^1, 24^1, 57^{14}, 66^1, ∞^{16}	0^1, 18^2, 20^3, 24^4, 57^{14}, 66^5, 108^1, 120^1, ∞^2	0^1, 18^2, 20^3, 24^4, 57^{28}, 66^6, 76^{117}, 108^1, 120^1, ∞^{47}
120	24^1, 30^1	24^1, 30^1, 60^{15}, 72^1, ∞^{18}	0^1, 24^3, 27^4, 30^4, 60^{15}, 72^4, 114^2, 132^1, ∞^2	0^1, 24^3, 27^4, 30^4, 60^{30}, 72^5, 80^{129}, 114^2, 132^1, ∞^{52}
126	30^1, 36^1	30^1, 36^1, 63^{16}, 78^1, ∞^{20}	0^1, 30^4, 33^4, 36^5, 63^{16}, 78^3, 120^3, 144^1, ∞^2	0^1, 30^4, 33^4, 36^5, 63^{32}, 78^4, 84^{142}, 120^3, 144^1, ∞^{57}
132	36^1, 42^1	36^1, 42^1, 66^{17}, 84^1, ∞^{22}	0^1, 36^5, 39^4, 42^6, 66^{17}, 84^2, 126^4, 156^1, ∞^2	0^1, 36^5, 39^4, 42^6, 66^{34}, 84^3, 88^{156}, 126^4, 156^1, ∞^{62}

138	6^1, 42^1	6^1, 42^1, 69^{18}, 90^1, ∞^{24}	0^1, 6^2, 42^6, 45^4, 48^5, 69^{18}, 90^1, 132^5, 168^1, ∞^2	0^1, 6^2, 42^6, 45^4, 48^5, 69^{36}, 90^2, 92^{171}, 132^5, 168^1, ∞^{67}
144	9^2	9^2, 72^{19}, 75^2, ∞^{25}	0^1, 9^4, 12^1, 48^5, 51^4, 54^4, 72^{19}, 75^2, 138^6, ∞^2	0^1, 9^4, 12^1, 48^5, 51^4, 54^4, 72^{38}, 75^4, 96^{187}, 138^6, ∞^{71}
150	12^3	12^3, 75^{18}, $\frac{159}{2}^4$, ∞^{27}	0^1, 12^6, 16^3, 54^6, 60^5, 75^{18}, $\frac{159}{2}^4$, 108^1, 144^5, ∞^3	0^1, 12^6, 16^3, 54^6, 60^5, 75^{36}, $\frac{159}{2}^8$, 100^{204}, 108^1, 144^5, ∞^{76}

Table 23: Slopes for $q = 7$, $i = 1$, type 2. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
3				0^1
9				4^3
15		∞^1	0^1	0^1, 8^3, ∞^2
21		∞^2	0^1, 12^1	0^1, 12^5, ∞^4
27		12^1, ∞^2	0^1, 12^2	0^1, 12^3, 16^6, ∞^5
33		15^2, ∞^2	0^1, 12^1, 15^2	0^1, 12^1, 15^4, 20^9, ∞^6
39		18^3, ∞^2	0^1, 12^1, 18^3	0^1, 12^1, 18^6, 24^{13}, ∞^7
45		21^4, ∞^2	0^1, 12^1, 21^4	0^1, 12^1, 21^8, 28^{18}, ∞^8
51		24^5, ∞^2	6^2, 24^5	6^2, 24^{10}, 32^{24}, ∞^9
57		27^6, ∞^2	0^1, 12^1, 27^6	0^1, 12^1, 27^{12}, 36^{31}, ∞^{10}
63		30^5, 48^1, ∞^4	0^1, 6^2, 30^5, 48^1, 96^1	0^1, 6^2, 30^{10}, 40^{36}, 48^2, 96^1, ∞^{14}
69		33^6, 48^1, ∞^5	0^1, 6^2, 12^1, 33^6, 48^1, 96^1	0^1, 6^2, 12^1, 33^{12}, 44^{42}, 48^2, 96^1, ∞^{17}
75		36^7, 48^1, 60^1, ∞^5	0^1, 6^2, 12^1, 36^7, 48^1, 60^1, 96^1	0^1, 6^2, 12^1, 36^{14}, 48^{51}, 60^2, 96^1, ∞^{19}
81		39^8, 48^1, 63^2, ∞^5	0^1, 6^2, 12^1, 39^8, 48^1, 63^2, 96^1	0^1, 6^2, 12^1, 39^{16}, 48^2, 52^{57}, 63^4, 96^1, ∞^{21}
87		42^9, 48^1, 66^3, ∞^5	0^1, 6^2, 12^1, 42^9, 48^1, 66^3, 96^1	0^1, 6^2, 12^1, 42^{18}, 48^2, 56^{66}, 66^6, 96^1, ∞^{23}
93		45^{10}, 48^1, 69^4, ∞^5	4^3, 12^1, 45^{10}, 48^1, 69^4, 96^1	4^3, 12^1, 45^{20}, 48^2, 60^{76}, 69^8, 96^1, ∞^{25}
99		48^{12}, 72^5, ∞^5	0^1, 8^3, 48^{12}, 72^5, 96^1	0^1, 8^3, 48^{24}, 64^{87}, 72^{10}, 96^1, ∞^{27}
105		51^{10}, 54^4, 75^4, 84^1, ∞^5	0^1, 6^2, 12^1, 51^{10}, 54^4, 75^4, 84^1, 96^1	0^1, 6^2, 12^1, 51^{20}, 54^8, 68^{99}, 75^8, 84^2, 96^1, ∞^{29}
111	12^1	12^1, 54^9, 57^4, 78^3, 84^1, 96^1, ∞^8	0^1, 6^2, 12^3, 54^9, 57^4, 78^3, 84^1, 96^3, ∞^1	0^1, 6^2, 12^3, 54^{18}, 57^8, 72^{112}, 78^6, 84^2, 96^4, ∞^{34}
117	18^1	18^1, 57^{10}, 60^5, 81^2, 84^1, 96^1, ∞^{10}	0^1, 6^2, 12^1, 18^4, 57^{10}, 60^5, 81^2, 84^1, 96^3, ∞^1	0^1, 6^2, 12^1, 18^4, 57^{20}, 60^{10}, 76^{123}, 81^4, 84^2, 96^4, ∞^{39}

123	24^1	$24^1, 60^{11}, 63^6, 84^2, 96^1, 108^1, \infty^{11}$	$0^1, 6^2, 12^1, 24^5, 60^{11}, 63^6, 84^2, 96^3, 108^1, \infty^1$	$0^1, 6^2, 12^1, 24^5, 60^{22}, 63^{12}, 80^{135}, 84^4, 96^4, 108^2, \infty^{43}$
129	30^1	$30^1, 63^{12}, 66^7, 84^1, 96^1, 108^1, 114^1, \infty^{12}$	$0^1, 6^2, 12^1, 30^6, 63^{12}, 66^7, 84^1, 96^3, 108^1, 114^1, \infty^1$	$0^1, 6^2, 12^1, 30^6, 63^{24}, 66^{14}, 84^{150}, 96^4, 108^2, 114^2, \infty^{47}$
135	36^1	$36^1, 66^{13}, \frac{135}{2}^4, 69^4, 96^1, 111^2, 120^1, \infty^{13}$	$4^3, 12^1, 36^7, 66^{13}, \frac{135}{2}^4, 69^4, 96^3, 111^2, 120^1, \infty^1$	$4^3, 12^1, 36^7, 66^{26}, \frac{135}{2}^8, 69^8, 88^{162}, 96^4, 111^4, 120^2, \infty^{51}$
141	42^1	$42^1, 69^{16}, 72^7, 114^3, 126^1, \infty^{14}$	$0^1, 8^3, 42^8, 69^{16}, 72^7, 96^2, 114^3, 126^1, \infty^1$	$0^1, 8^3, 42^8, 69^{32}, 72^{14}, 92^{177}, 96^2, 114^6, 126^2, \infty^{55}$
147	48^1	$48^1, 72^{15}, \frac{147}{2}^4, 75^6, 117^4, \infty^{15}$	$0^1, 6^2, 12^1, 18^2, 48^7, 72^{15}, \frac{147}{2}^4, 75^6, 96^2, 117^4, \infty^1$	$0^1, 6^2, 12^1, 18^2, 48^7, 72^{30}, \frac{147}{2}^8, 75^{12}, 96^{195}, 117^8, \infty^{59}$

Table 24: Slopes for $q = 7$, $i = 1$, type 3. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
0				
6				0^1
12				4^3
18				8^6
24		∞^1	0^1	0^1, 12^7, ∞^2
30		∞^2	0^1, 12^1	0^1, 12^1, 16^9, ∞^4
36		∞^3	0^1, 12^1, 24^1	0^1, 12^1, 20^{12}, 24^1, ∞^6
42		18^1, ∞^3	0^1, 12^1, 18^1, 24^1	0^1, 12^1, 18^2, 24^{17}, ∞^7
48		21^2, ∞^3	0^1, 12^1, 21^2, 24^1	0^1, 12^1, 21^4, 24^1, 28^{21}, ∞^8
54		24^3, ∞^3	6^2, 24^4	6^2, 24^7, 32^{27}, ∞^9
60		27^4, ∞^3	12^3, 27^4	12^3, 27^8, 36^{34}, ∞^{10}
66		30^5, ∞^3	0^1, 18^2, 30^5	0^1, 18^2, 30^{10}, 40^{42}, ∞^{11}
72		33^4, 48^1, ∞^5	0^1, 6^2, 24^1, 33^4, 48^1, 96^1	0^1, 6^2, 24^1, 33^8, 44^{48}, 48^2, 96^1, ∞^{15}
78		36^3, 48^1, 54^1, ∞^7	0^1, 6^2, 12^1, 24^1, 36^3, 48^1, 54^1, 96^1, 108^1	0^1, 6^2, 12^1, 24^1, 36^6, 48^{57}, 54^2, 96^1, 108^1, ∞^{19}
84		39^4, 48^1, 54^1, ∞^8	0^1, 6^2, 12^1, 24^2, 39^4, 48^1, 54^1, 96^1, 108^1	0^1, 6^2, 12^1, 24^2, 39^8, 48^2, 52^{63}, 54^2, 96^1, 108^1, ∞^{22}
90		42^5, 48^1, 54^1, 66^1, ∞^8	0^1, 6^2, 12^1, 24^2, 42^5, 48^1, 54^1, 66^1, 96^1, 108^1	0^1, 6^2, 12^1, 24^2, 42^{10}, 48^2, 54^2, 56^{72}, 66^2, 96^1, 108^1, ∞^{24}
96		45^6, 48^1, 54^1, 69^2, ∞^8	4^3, 12^1, 24^2, 45^6, 48^1, 54^1, 69^2, 96^1, 108^1	4^3, 12^1, 24^2, 45^{12}, 48^2, 54^2, 60^{82}, 69^4, 96^1, 108^1, ∞^{26}
102		48^8, 54^1, 72^3, ∞^8	8^3, 12^2, 24^1, 48^8, 54^1, 72^3, 96^1, 108^1	8^3, 12^2, 24^1, 48^{16}, 54^2, 64^{93}, 72^6, 96^1, 108^1, ∞^{28}
108		51^{10}, 75^4, ∞^8	0^1, 12^1, 15^4, 51^{10}, 75^4, 102^2	0^1, 12^1, 15^4, 51^{20}, 68^{105}, 75^8, 102^2, ∞^{30}
114		54^8, 57^4, 78^3, 84^1, ∞^8	0^1, 6^2, 18^2, 24^1, 54^8, 57^4, 78^3, 84^1, 96^1, 108^1	0^1, 6^2, 18^2, 24^1, 54^{16}, 57^8, 72^{118}, 78^6, 84^2, 96^1, 108^1, ∞^{32}

120		57^6, 60^4, 75^2, 81^2, 84^1, 96^1, ∞^{11}	0^1, 6^2, 12^3, 24^1, 57^6, 60^4, 75^2, 81^2, 84^1, 96^3, 150^2	0^1, 6^2, 12^3, 24^1, 57^{12}, 60^8, 75^4, 76^{129}, 81^4, 84^2, 96^4, 150^2, ∞^{38}
126		60^7, 63^4, 75^2, 84^2, 96^1, 102^1, ∞^{13}	0^1, 6^2, 12^3, 18^2, 60^7, 63^4, 75^2, 84^2, 96^3, 102^1, 108^1, 150^2	0^1, 6^2, 12^3, 18^2, 60^{14}, 63^8, 75^4, 80^{141}, 84^4, 96^4, 102^2, 108^1, 150^2, ∞^{43}
132		63^8, 66^5, 75^2, 84^1, 96^1, 102^1, 108^1, ∞^{14}	0^1, 6^2, 12^3, 18^2, 24^1, 63^8, 66^5, 75^2, 84^1, 96^3, 102^1, 108^2, 150^2	0^1, 6^2, 12^3, 18^2, 24^1, 63^{16}, 66^{10}, 75^4, 84^{156}, 96^4, 102^2, 108^3, 150^2, ∞^{47}
138		66^9, $\frac{135}{2}^4$, 69^2, 75^2, 96^1, 102^1, 111^2, 114^1, ∞^{14}	4^3, 12^3, 18^2, 24^1, 66^9, $\frac{135}{2}^4$, 69^2, 75^2, 96^3, 102^1, 108^1, 111^2, 114^1, 150^2	4^3, 12^3, 18^2, 24^1, 66^{18}, $\frac{135}{2}^8$, 69^4, 75^4, 88^{168}, 96^4, 102^2, 108^1, 111^4, 114^2, 150^2, ∞^{50}
144		69^{12}, 72^5, 75^2, 102^1, 114^3, 117^2, ∞^{14}	8^6, 18^2, 24^1, 69^{12}, 72^5, 75^2, 96^2, 102^1, 108^1, 114^3, 117^2, 150^2	8^6, 18^2, 24^1, 69^{24}, 72^{10}, 75^4, 92^{183}, 96^2, 102^2, 108^1, 114^6, 117^4, 150^2, ∞^{53}
150		72^{15}, 75^4, 78^2, 117^4, 120^3, ∞^{14}	0^1, 12^7, 24^1, 72^{15}, 75^4, 78^2, 96^1, 108^2, 117^4, 120^3, 144^2	0^1, 12^7, 24^1, 72^{30}, 75^8, 78^4, 96^{200}, 108^2, 117^8, 120^6, 144^2, ∞^{56}

Table 25: Slopes for $q = 7$, $i = 1$, type 4. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
3				
9				0^1
15				4^3
21				8^6
27				12^{10}
33		∞^1	0^1	0^1, 16^{12}, ∞^2
39		∞^2	0^1, 12^1	0^1, 12^1, 20^{15}, ∞^4
45		∞^3	0^1, 12^1, 24^1	0^1, 12^1, 24^{20}, ∞^6
51		∞^4	0^1, 12^1, 24^1, 36^1	0^1, 12^1, 24^1, 28^{24}, 36^1, ∞^8
57		24^1, ∞^4	6^2, 24^2, 36^1	6^2, 24^3, 32^{30}, 36^1, ∞^9
63		27^2, ∞^4	12^3, 27^2, 36^1	12^3, 27^4, 36^{38}, ∞^{10}
69		30^3, ∞^4	18^4, 30^3	18^4, 30^6, 40^{45}, ∞^{11}
75		33^4, ∞^4	0^1, 24^3, 33^4	0^1, 24^3, 33^8, 44^{54}, ∞^{12}
81		36^3, 48^1, ∞^6	0^1, 6^2, 30^2, 36^3, 48^1, 96^1	0^1, 6^2, 30^2, 36^6, 48^{63}, 96^1, ∞^{16}
87		39^2, 48^1, 54^1, ∞^8	0^1, 6^2, 12^1, 24^1, 36^1, 39^2, 48^1, 54^1, 96^1, 108^1	0^1, 6^2, 12^1, 24^1, 36^1, 39^4, 48^2, 52^{69}, 54^2, 96^1, 108^1, ∞^{20}
93		42^1, 48^1, 54^1, 60^1, ∞^{10}	0^1, 6^2, 12^1, 24^2, 36^1, 42^1, 48^1, 54^1, 60^1, 96^1, 108^1, 120^1	0^1, 6^2, 12^1, 24^2, 36^1, 42^2, 48^2, 54^2, 56^{78}, 60^2, 96^1, 108^1, 120^1, ∞^{24}
99		45^2, 48^1, 54^1, 60^1, ∞^{11}	4^3, 12^1, 24^2, 36^2, 45^2, 48^1, 54^1, 60^1, 96^1, 108^1, 120^1	4^3, 12^1, 24^2, 36^2, 45^4, 48^2, 54^2, 60^{90}, 96^1, 108^1, 120^1, ∞^{27}
105		48^4, 54^1, 60^1, 72^1, ∞^{11}	8^3, 12^2, 24^1, 36^2, 48^4, 54^1, 60^1, 72^1, 96^1, 108^1, 120^1	8^3, 12^2, 24^1, 36^2, 48^8, 54^2, 60^2, 64^{99}, 72^2, 96^1, 108^1, 120^1, ∞^{29}
111		51^6, 60^1, 75^2, ∞^{11}	12^1, 15^4, 18^2, 36^1, 51^6, 60^1, 75^2, 102^2, 120^1	12^1, 15^4, 18^2, 36^1, 51^{12}, 60^2, 68^{111}, 75^4, 102^2, 120^1, ∞^{31}
117		54^8, 78^3, ∞^{11}	0^1, 18^2, 21^4, 24^1, 54^8, 78^3, 108^3	0^1, 18^2, 21^4, 24^1, 54^{16}, 72^{124}, 78^6, 108^3, ∞^{33}

123		57^6, 60^4, 81^2, 84^1, ∞^{11}	0^1, 6^2, 24^3, 30^2, 57^6, 60^4, 81^2, 84^1, 96^1, 114^2	0^1, 6^2, 24^3, 30^2, 57^{12}, 60^8, 76^{138}, 81^4, 84^2, 96^1, 114^2, ∞^{35}
129		60^4, 63^4, 75^2, 84^2, 96^1, ∞^{14}	0^1, 6^2, 12^3, 30^2, 36^1, 60^4, 63^4, 75^2, 84^2, 96^3, 120^1, 150^2	0^1, 6^2, 12^3, 30^2, 36^1, 60^8, 63^8, 75^4, 80^{150}, 84^4, 96^4, 120^1, 150^2, ∞^{41}
135		63^2, 66^4, 75^2, 81^2, 84^1, 96^1, 102^1, ∞^{17}	0^1, 6^2, 12^3, 18^2, 36^2, 63^2, 66^4, 75^2, 81^2, 84^1, 96^3, 102^1, 108^1, 150^2, 162^2	0^1, 6^2, 12^3, 18^2, 36^2, 63^4, 66^8, 75^4, 81^4, 84^{165}, 96^4, 102^2, 108^1, 150^2, 162^2, ∞^{47}
141		66^3, $\frac{135}{2}^4$, 75^2, 81^2, 96^1, 102^1, 108^1, ∞^{19}	4^3, 12^3, 18^2, 24^1, 36^2, 66^3, $\frac{135}{2}^4$, 75^2, 81^2, 96^3, 102^1, 108^2, 120^1, 150^2, 162^2	4^3, 12^3, 18^2, 24^1, 36^2, 66^6, $\frac{135}{2}^8$, 75^4, 81^4, 88^{177}, 96^4, 102^2, 108^3, 120^1, 150^2, 162^2, ∞^{52}
147		69^6, 72^3, 75^2, 81^2, 102^1, 108^1, 114^1, ∞^{20}	8^6, 18^2, 24^1, 36^3, 69^6, 72^3, 75^2, 81^2, 96^2, 102^1, 108^2, 114^1, 120^1, 150^2, 162^2	8^6, 18^2, 24^1, 36^3, 69^{12}, 72^6, 75^4, 81^4, 92^{192}, 96^2, 102^2, 108^3, 114^2, 120^1, 150^2, 162^2, ∞^{56}

Table 26: Slopes for $q = 7$, $i = 1$, type 5. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
0				
6				
12				0^1
18				4^3
24				8^6
30				12^{10}
36				16^{15}
42		∞^1	0^1	0^1, 20^{18}, ∞^2
48		∞^2	0^1, 12^1	0^1, 12^1, 24^{22}, ∞^4
54		∞^3	0^1, 12^1, 24^1	0^1, 12^1, 24^1, 28^{27}, ∞^6
60		∞^4	6^2, 24^1, 36^1	6^2, 24^1, 32^{33}, 36^1, ∞^8
66		∞^5	12^3, 36^1, 48^1	12^3, 36^{41}, 48^1, ∞^{10}
72		30^1, ∞^5	18^4, 30^1, 48^1	18^4, 30^2, 40^{48}, 48^1, ∞^{11}
78		33^2, ∞^5	24^5, 33^2	24^5, 33^4, 44^{57}, ∞^{12}
84		36^3, ∞^5	0^1, 30^4, 36^3	0^1, 30^4, 36^6, 48^{67}, ∞^{13}
90		39^2, 48^1, ∞^7	0^1, 6^2, 36^3, 39^2, 48^1, 96^1	0^1, 6^2, 36^3, 39^4, 48^2, 52^{75}, 96^1, ∞^{17}
96		42^1, 48^1, 54^1, ∞^9	0^1, 6^2, 12^1, 24^1, 42^3, 48^1, 54^1, 96^1, 108^1	0^1, 6^2, 12^1, 24^1, 42^4, 48^2, 54^2, 56^{84}, 96^1, 108^1, ∞^{21}
102		48^1, 54^1, 60^1, ∞^{11}	4^3, 12^1, 24^2, 36^1, 48^2, 54^1, 60^1, 96^1, 108^1, 120^1	4^3, 12^1, 24^2, 36^1, 48^3, 54^2, 60^{96}, 96^1, 108^1, 120^1, ∞^{25}
108		54^1, 60^1, 66^1, ∞^{13}	8^3, 12^2, 24^1, 36^2, 48^1, 54^1, 60^1, 66^1, 96^1, 108^1, 120^1, 132^1	8^3, 12^2, 24^1, 36^2, 48^1, 54^2, 60^2, 64^{105}, 66^2, 96^1, 108^1, 120^1, 132^1, ∞^{29}
114		51^2, 60^1, 66^1, ∞^{14}	12^1, 15^4, 18^2, 36^1, 48^2, 51^2, 60^1, 66^1, 102^2, 120^1, 132^1	12^1, 15^4, 18^2, 36^1, 48^2, 51^4, 60^2, 66^2, 68^{117}, 102^2, 120^1, 132^1, ∞^{32}
120		54^4, 66^1, 78^1, ∞^{14}	18^2, 21^4, 24^3, 48^1, 54^4, 66^1, 78^1, 108^3, 132^1	18^2, 21^4, 24^3, 48^1, 54^8, 66^2, 72^{130}, 78^2, 108^3, 132^1, ∞^{34}

126		$57^{\mathbf{6}}$, $81^{\mathbf{2}}$, $\infty^{\mathbf{14}}$	$0^{\mathbf{1}}$, $24^{\mathbf{3}}$, $27^{\mathbf{4}}$, $30^{\mathbf{2}}$, $57^{\mathbf{6}}$, $81^{\mathbf{2}}$, $114^{\mathbf{4}}$	$0^{\mathbf{1}}$, $24^{\mathbf{3}}$, $27^{\mathbf{4}}$, $30^{\mathbf{2}}$, $57^{\mathbf{12}}$, $76^{\mathbf{144}}$, $81^{\mathbf{4}}$, $114^{\mathbf{4}}$, $\infty^{\mathbf{36}}$
132		$60^{\mathbf{4}}$, $63^{\mathbf{4}}$, $84^{\mathbf{2}}$, $\infty^{\mathbf{14}}$	$0^{\mathbf{1}}$, $6^{\mathbf{2}}$, $30^{\mathbf{4}}$, $36^{\mathbf{3}}$, $60^{\mathbf{4}}$, $63^{\mathbf{4}}$, $84^{\mathbf{2}}$, $96^{\mathbf{1}}$, $120^{\mathbf{3}}$	$0^{\mathbf{1}}$, $6^{\mathbf{2}}$, $30^{\mathbf{4}}$, $36^{\mathbf{3}}$, $60^{\mathbf{8}}$, $63^{\mathbf{8}}$, $80^{\mathbf{159}}$, $84^{\mathbf{4}}$, $96^{\mathbf{1}}$, $120^{\mathbf{3}}$, $\infty^{\mathbf{38}}$
138		$63^{\mathbf{2}}$, $66^{\mathbf{4}}$, $75^{\mathbf{2}}$, $84^{\mathbf{1}}$, $96^{\mathbf{1}}$, $\infty^{\mathbf{17}}$	$0^{\mathbf{1}}$, $6^{\mathbf{2}}$, $12^{\mathbf{3}}$, $36^{\mathbf{3}}$, $42^{\mathbf{2}}$, $63^{\mathbf{2}}$, $66^{\mathbf{4}}$, $75^{\mathbf{2}}$, $84^{\mathbf{1}}$, $96^{\mathbf{3}}$, $126^{\mathbf{2}}$, $150^{\mathbf{2}}$	$0^{\mathbf{1}}$, $6^{\mathbf{2}}$, $12^{\mathbf{3}}$, $36^{\mathbf{3}}$, $42^{\mathbf{2}}$, $63^{\mathbf{4}}$, $66^{\mathbf{8}}$, $75^{\mathbf{4}}$, $84^{\mathbf{174}}$, $96^{\mathbf{4}}$, $126^{\mathbf{2}}$, $150^{\mathbf{2}}$, $\infty^{\mathbf{44}}$
144		$\frac{135}{2}^{\mathbf{4}}$, $75^{\mathbf{2}}$, $81^{\mathbf{2}}$, $96^{\mathbf{1}}$, $102^{\mathbf{1}}$, $\infty^{\mathbf{20}}$	$4^{\mathbf{3}}$, $12^{\mathbf{3}}$, $18^{\mathbf{2}}$, $36^{\mathbf{1}}$, $42^{\mathbf{2}}$, $48^{\mathbf{1}}$, $\frac{135}{2}^{\mathbf{4}}$, $75^{\mathbf{2}}$, $81^{\mathbf{2}}$, $96^{\mathbf{3}}$, $102^{\mathbf{1}}$, $108^{\mathbf{1}}$, $132^{\mathbf{1}}$, $150^{\mathbf{2}}$, $162^{\mathbf{2}}$	$4^{\mathbf{3}}$, $12^{\mathbf{3}}$, $18^{\mathbf{2}}$, $36^{\mathbf{1}}$, $42^{\mathbf{2}}$, $48^{\mathbf{1}}$, $\frac{135}{2}^{\mathbf{8}}$, $75^{\mathbf{4}}$, $81^{\mathbf{4}}$, $88^{\mathbf{186}}$, $96^{\mathbf{4}}$, $102^{\mathbf{2}}$, $108^{\mathbf{1}}$, $132^{\mathbf{1}}$, $150^{\mathbf{2}}$, $162^{\mathbf{2}}$, $\infty^{\mathbf{50}}$
150		$72^{\mathbf{2}}$, $75^{\mathbf{2}}$, $81^{\mathbf{2}}$, $87^{\mathbf{2}}$, $102^{\mathbf{1}}$, $108^{\mathbf{1}}$, $\infty^{\mathbf{23}}$	$8^{\mathbf{6}}$, $18^{\mathbf{2}}$, $24^{\mathbf{1}}$, $36^{\mathbf{2}}$, $48^{\mathbf{2}}$, $72^{\mathbf{2}}$, $75^{\mathbf{2}}$, $81^{\mathbf{2}}$, $87^{\mathbf{2}}$, $96^{\mathbf{2}}$, $102^{\mathbf{1}}$, $108^{\mathbf{2}}$, $120^{\mathbf{1}}$, $150^{\mathbf{2}}$, $162^{\mathbf{2}}$, $174^{\mathbf{2}}$	$8^{\mathbf{6}}$, $18^{\mathbf{2}}$, $24^{\mathbf{1}}$, $36^{\mathbf{2}}$, $48^{\mathbf{2}}$, $72^{\mathbf{4}}$, $75^{\mathbf{4}}$, $81^{\mathbf{4}}$, $87^{\mathbf{4}}$, $92^{\mathbf{201}}$, $96^{\mathbf{2}}$, $102^{\mathbf{2}}$, $108^{\mathbf{3}}$, $120^{\mathbf{1}}$, $150^{\mathbf{2}}$, $162^{\mathbf{2}}$, $174^{\mathbf{2}}$, $\infty^{\mathbf{56}}$

5.2 $i = 2$.

Table 27: Slopes for $q = 7$, $i = 2$, type 0. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
3				
9				
15				0^1
21				2^3
27				4^6
33				6^{10}
39				8^{15}
45				10^{21}
51		0^1	0^1	0^2, 12^{25}, ∞^1
57		0^1, 6^1	0^1, 6^1	0^2, 6^2, 14^{30}, ∞^2
63		3^2, 12^1	3^2, 12^1	3^4, 12^2, 16^{36}, ∞^3
69		6^3, 18^1	6^3, 18^1	6^6, 18^{45}, ∞^4
75		9^4, 24^1	9^4, 24^1	9^8, 20^{51}, 24^2, ∞^5
81		12^5, 30^1	12^5, 30^1	12^{10}, 22^{60}, 30^2, ∞^6
87		0^1, 15^6	15^6, ∞^1	0^1, 15^{12}, 24^{70}, ∞^8
93		0^3, 18^5	0^1, 18^5, ∞^2	0^4, 18^{10}, 26^{81}, ∞^{10}
99		0^2, 3^2, 12^1, 21^4, 48^1	0^1, 3^2, 21^4, 48^1, ∞^2	0^3, 3^4, 12^1, 21^8, 28^{90}, 48^2, ∞^{12}
105		2^3, 6^2, 12^1, 18^1, 24^3, 48^1, 54^1	2^3, 6^1, 12^1, 24^3, 48^1, 54^1, ∞^2	2^6, 6^3, 12^2, 18^1, 24^6, 30^{100}, 48^2, 54^2, ∞^{14}
111		4^3, 6^2, 12^2, 18^1, 24^1, 27^2, 48^1, 54^1, 60^1	4^3, 6^2, 12^1, 18^1, 27^2, 48^1, 54^1, 60^1, ∞^2	4^6, 6^4, 12^3, 18^2, 24^1, 27^4, 32^{111}, 48^2, 54^2, 60^2, ∞^{16}
117		6^1, $\frac{15}{2}^4$, 9^2, 18^2, 24^1, 30^2, 51^2, 60^1, 66^1	6^1, $\frac{15}{2}^4$, 9^2, 18^1, 24^1, 30^1, 51^2, 60^1, 66^1, ∞^2	6^2, $\frac{15}{2}^8$, 9^4, 18^3, 24^2, 30^3, 34^{123}, 51^4, 60^2, 66^2, ∞^{18}
123		9^2, $\frac{21}{2}^4$, 12^3, 24^2, 30^1, 36^1, 54^3, 66^1, 72^1	9^2, $\frac{21}{2}^4$, 12^3, 24^1, 30^1, 54^3, 66^1, 72^1, ∞^2	9^4, $\frac{21}{2}^8$, 12^6, 24^3, 30^2, 36^{137}, 54^6, 66^2, 72^2, ∞^{20}

129		0^2, 12^3, $\frac{27}{2}^4$, 15^4, 30^2, 57^4, 72^1	12^3, $\frac{27}{2}^4$, 15^4, 30^1, 57^4, 72^1, ∞^3	0^2, 12^6, $\frac{27}{2}^8$, 15^8, 30^3, 38^{150}, 57^8, 72^2, ∞^{23}
135		0^5, 15^4, $\frac{33}{2}^4$, 18^3, 48^1, 60^5	0^1, 15^4, $\frac{33}{2}^4$, 18^3, 60^5, ∞^5	0^6, 15^8, $\frac{33}{2}^8$, 18^6, 40^{165}, 48^1, 60^{10}, ∞^{27}
141		0^3, 3^2, 6^4, 18^5, 21^4, 42^1, 48^1, 63^4	0^1, 3^2, 18^5, 21^4, 48^1, 63^4, ∞^7	0^4, 3^4, 6^4, 18^{10}, 21^8, 42^{182}, 48^2, 63^8, ∞^{31}
147		2^3, 3^4, 6^3, 18^2, 21^4, 24^3, 48^2, 60^1, 66^3, 75^2	2^3, 6^3, 21^4, 24^3, 48^2, 66^3, 75^2, ∞^7	2^6, 3^4, 6^6, 18^2, 21^8, 24^6, 44^{195}, 48^4, 60^1, 66^6, 75^4, ∞^{34}

Table 28: Slopes for $q = 7$, $i = 2$, type 1. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
0				0^1
6		0^1	0^1	0^2, ∞^1
12		0^2	0^1, ∞^1	0^3, ∞^3
18		0^3	0^1, ∞^2	0^4, 6^1, ∞^5
24		0^4	0^1, ∞^3	0^5, 8^3, ∞^7
30		0^5	0^1, ∞^4	0^6, 10^6, ∞^9
36		0^6	0^1, ∞^5	0^7, 12^{10}, ∞^{11}
42		0^7	0^1, ∞^6	0^8, 14^{15}, ∞^{13}
48		0^8	0^1, ∞^7	0^9, 16^{21}, ∞^{15}
54	0^1	0^9, ∞^1	0^2, ∞^8	0^{10}, 18^{28}, ∞^{17}
60	0^1	0^{10}, 6^1, ∞^1	0^2, 6^1, ∞^9	0^{11}, 6^2, 20^{33}, ∞^{20}
66	0^1	0^{11}, 9^2, ∞^1	0^2, 9^2, ∞^{10}	0^{12}, 9^4, 22^{39}, ∞^{23}
72	0^1	0^{12}, 12^3, ∞^1	0^2, 12^3, ∞^{11}	0^{13}, 12^6, 24^{46}, ∞^{26}
78	0^1	0^{13}, 15^4, ∞^1	0^2, 15^4, ∞^{12}	0^{14}, 15^8, 26^{54}, ∞^{29}
84	0^1	0^{14}, 18^5, ∞^1	0^2, 18^5, ∞^{13}	0^{15}, 18^{10}, 28^{63}, ∞^{32}
90	0^1	0^{15}, 21^6, ∞^1	0^2, 21^6, ∞^{14}	0^{16}, 21^{12}, 30^{73}, ∞^{35}
96	0^1	0^{16}, 24^7, ∞^1	0^2, 24^7, ∞^{15}	0^{17}, 24^{14}, 32^{84}, ∞^{38}
102	0^2	0^{17}, 6^2, 27^6, ∞^2	0^3, 6^1, 27^6, ∞^{17}	0^{18}, 6^3, 27^{12}, 34^{96}, ∞^{42}
108	0^2	0^{18}, 8^3, 12^1, 30^5, 54^1, ∞^2	0^3, 8^3, 30^5, 54^1, ∞^{18}	0^{19}, 8^6, 12^1, 30^{10}, 36^{106}, 54^2, ∞^{46}
114	0^2	0^{19}, 10^3, 12^2, 18^1, 33^4, 54^1, 60^1, ∞^2	0^3, 10^3, 12^2, 33^4, 54^1, 60^1, ∞^{19}	0^{20}, 10^6, 12^4, 18^1, 33^8, 38^{117}, 54^2, 60^2, ∞^{50}
120	0^2	0^{20}, 12^1, $\frac{27}{2}^4$, 15^2, 24^1, 36^3, 57^2, 66^1, ∞^2	0^3, 12^1, $\frac{27}{2}^4$, 15^2, 36^3, 57^2, 66^1, ∞^{20}	0^{21}, 12^2, $\frac{27}{2}^8$, 15^4, 24^1, 36^6, 40^{129}, 57^4, 66^2, ∞^{54}
126	0^2	0^{21}, 15^2, $\frac{33}{2}^4$, 18^3, 30^1, 39^2, 60^3, 72^1, ∞^2	0^3, 15^2, $\frac{33}{2}^4$, 18^3, 39^2, 60^3, 72^1, ∞^{21}	0^{22}, 15^4, $\frac{33}{2}^8$, 18^6, 30^1, 39^4, 42^{142}, 60^6, 72^2, ∞^{58}
132	0^2	0^{22}, 18^3, $\frac{39}{2}^4$, 21^4, 36^1, 42^1, 63^4, 78^1, ∞^2	0^3, 18^3, $\frac{39}{2}^4$, 21^4, 42^1, 63^4, 78^1, ∞^{22}	0^{23}, 18^6, $\frac{39}{2}^8$, 21^8, 36^1, 42^2, 44^{156}, 63^8, 78^2, ∞^{62}

138	0^2	0^{23}, 21^4, $\frac{45}{2}^4$, 24^5, 42^1, 66^5, 84^1, ∞^2	0^3, 21^4, $\frac{45}{2}^4$, 24^5, 66^5, 84^1, ∞^{23}	0^{24}, 21^8, $\frac{45}{2}^8$, 24^{10}, 42^1, 46^{171}, 66^{10}, 84^2, ∞^{66}
144	0^2	0^{24}, 6^3, 24^5, $\frac{51}{2}^4$, 27^4, 69^6, ∞^2	0^3, 6^1, 24^5, $\frac{51}{2}^4$, 27^4, 69^6, ∞^{25}	0^{25}, 6^4, 24^{10}, $\frac{51}{2}^8$, 27^8, 48^{187}, 69^{12}, ∞^{71}
150	0^3	0^{25}, 8^3, 9^4, 27^6, 30^5, 54^1, 72^5, ∞^3	0^4, 8^3, 27^6, 30^5, 54^1, 72^5, ∞^{28}	0^{26}, 8^6, 9^4, 27^{12}, 30^{10}, 50^{204}, 54^2, 72^{10}, ∞^{77}

Table 29: Slopes for $q = 7$, $i = 2$, type 2. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
3				0^1
9				2^3
15		0^1	0^1	0^2, 4^3, ∞^1
21		0^1, 6^1	0^1, 6^1	0^2, 6^6, ∞^2
27		0^2, 6^1	0^1, 6^1, ∞^1	0^3, 6^2, 8^6, ∞^4
33		0^3, 6^1	0^1, 6^1, ∞^2	0^4, 6^2, 10^9, ∞^6
39		0^4, 6^1	0^1, 6^1, ∞^3	0^5, 6^2, 12^{13}, ∞^8
45		0^5, 6^1	0^1, 6^1, ∞^4	0^6, 6^2, 14^{18}, ∞^{10}
51		0^5, 3^2	3^2, ∞^5	0^5, 3^4, 16^{24}, ∞^{12}
57		0^7, 6^1	0^1, 6^1, ∞^6	0^8, 6^2, 18^{31}, ∞^{14}
63		0^6, 3^2, 36^1, 48^1	0^1, 3^2, 48^1, ∞^6	0^7, 3^4, 20^{36}, 36^1, 48^2, ∞^{16}
69		0^7, 3^2, 6^1, 30^1, 48^1	0^1, 3^2, 6^1, 48^1, ∞^7	0^8, 3^4, 6^2, 22^{42}, 30^1, 48^2, ∞^{19}
75		0^8, 3^2, 6^1, 24^1, 48^2	0^1, 3^2, 6^1, 48^1, ∞^9	0^9, 3^4, 6^2, 24^{50}, 48^3, ∞^{23}
81		0^9, 3^2, 6^1, 18^1, 48^3	0^1, 3^2, 6^1, 48^1, ∞^{11}	0^{10}, 3^4, 6^2, 18^1, 26^{57}, 48^4, ∞^{27}
87		0^{10}, 3^2, 6^1, 12^1, 48^4	0^1, 3^2, 6^1, 48^1, ∞^{13}	0^{11}, 3^4, 6^2, 12^1, 28^{66}, 48^5, ∞^{31}
93		0^{10}, 2^3, 6^2, 48^5	2^3, 6^1, 48^1, ∞^{15}	0^{10}, 2^6, 6^3, 30^{76}, 48^6, ∞^{35}
99		0^{13}, 4^3, 48^6	0^1, 4^3, 48^1, ∞^{17}	0^{14}, 4^6, 32^{87}, 48^7, ∞^{39}
105		0^{11}, 3^2, 6^5, 48^5, 66^1	0^1, 3^2, 6^1, 48^1, ∞^{19}	0^{12}, 3^4, 6^6, 34^{99}, 48^6, 66^1, ∞^{43}
111	0^1	0^{12}, 3^2, 6^5, 48^5, 60^1, 84^1, ∞^1	0^2, 3^2, 6^1, 48^2, ∞^{20}	0^{13}, 3^4, 6^6, 36^{112}, 48^7, 60^1, 84^1, ∞^{46}
117	0^1	0^{13}, 3^2, 6^6, 9^2, 48^4, 54^1, 78^1, ∞^1	0^2, 3^2, 6^1, 9^2, 48^2, ∞^{21}	0^{14}, 3^4, 6^7, 9^4, 38^{123}, 48^6, 54^1, 78^1, ∞^{50}
123	0^1	0^{14}, 3^2, 6^7, 12^3, 48^4, 72^1, 96^1, ∞^1	0^2, 3^2, 6^1, 12^3, 48^2, ∞^{23}	0^{15}, 3^4, 6^8, 12^6, 40^{135}, 48^6, 72^1, 96^1, ∞^{55}
129	0^1	0^{15}, 3^2, 6^8, 15^4, 42^1, 48^2, 66^1, 90^1, 102^1, ∞^1	0^2, 3^2, 6^1, 15^4, 48^2, ∞^{25}	0^{16}, 3^4, 6^9, 15^8, 42^{149}, 48^4, 66^1, 90^1, 102^1, ∞^{60}

135	0^1	0^{15}, 2^3, 3^4, 6^5, 18^5, 48^2, 60^1, 90^2, 108^1, ∞^1	0^1, 2^3, 6^1, 18^5, 48^2, ∞^{27}	0^{15}, 2^6, 3^4, 6^6, 18^{10}, 44^{162}, 48^4, 60^1, 90^2, 108^1, ∞^{65}
141	0^1	0^{19}, 4^3, 6^7, 21^6, 48^2, 90^3, 114^1, ∞^1	0^2, 4^3, 21^6, 48^2, ∞^{29}	0^{20}, 4^6, 6^7, 21^{12}, 46^{177}, 48^4, 90^3, 114^1, ∞^{70}
147	6^1	0^{16}, 3^6, 6^9, 9^2, 24^5, 48^2, 90^4, ∞^1	0^1, 3^2, 6^2, 9^2, 24^5, 48^2, ∞^{31}	0^{17}, 3^8, 6^{10}, 9^4, 24^{10}, 48^{197}, 90^4, ∞^{75}

Table 30: Slopes for $q = 7$, $i = 2$, type 3. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
0				
6				0^1
12				2^3
18				4^6
24		0^1	0^1	0^2, 6^7, ∞^1
30		0^1, 6^1	0^1, 6^1	0^2, 6^2, 8^9, ∞^2
36		0^1, 6^1, 12^1	0^1, 6^1, 12^1	0^2, 6^2, 10^{12}, 12^2, ∞^3
42		0^2, 6^1, 12^1	0^1, 6^1, 12^1, ∞^1	0^3, 6^2, 12^{18}, ∞^5
48		0^3, 6^1, 12^1	0^1, 6^1, 12^1, ∞^2	0^4, 6^2, 12^2, 14^{21}, ∞^7
54		0^3, 3^2, 12^1	3^2, 12^1, ∞^3	0^3, 3^4, 12^2, 16^{27}, ∞^9
60		0^4, 6^3	6^3, ∞^4	0^4, 6^6, 18^{34}, ∞^{11}
66		0^6, 9^2	0^1, 9^2, ∞^5	0^7, 9^4, 20^{42}, ∞^{13}
72		0^5, 3^2, 12^1, 30^1, 48^1	0^1, 3^2, 12^1, 48^1, ∞^5	0^6, 3^4, 12^2, 22^{48}, 30^1, 48^2, ∞^{15}
78		0^4, 3^2, 6^1, 12^1, 24^1, 36^1, 48^1, 54^1	0^1, 3^2, 6^1, 12^1, 48^1, 54^1, ∞^5	0^5, 3^4, 6^2, 12^2, 24^{56}, 36^1, 48^2, 54^2, ∞^{17}
84		0^5, 3^2, 6^1, 12^2, 18^1, 30^1, 48^1, 54^1	0^1, 3^2, 6^1, 12^2, 48^1, 54^1, ∞^6	0^6, 3^4, 6^2, 12^4, 18^1, 26^{63}, 30^1, 48^2, 54^2, ∞^{20}
90		0^6, 3^2, 6^1, 12^3, 24^1, 48^2, 54^1	0^1, 3^2, 6^1, 12^2, 48^1, 54^1, ∞^8	0^7, 3^4, 6^2, 12^5, 24^1, 28^{72}, 48^3, 54^2, ∞^{24}
96		0^6, 2^3, 6^2, 12^2, 18^1, 48^3, 54^1	2^3, 6^1, 12^2, 48^1, 54^1, ∞^{10}	0^6, 2^6, 6^3, 12^4, 18^1, 30^{82}, 48^4, 54^2, ∞^{28}
102		0^8, 4^3, 6^2, 12^2, 48^4, 54^1	4^3, 6^2, 12^1, 48^1, 54^1, ∞^{12}	0^8, 4^6, 6^4, 12^3, 32^{93}, 48^5, 54^2, ∞^{32}
108		0^{11}, 6^1, $\frac{15}{2}^4$, 48^4, 51^2	0^1, 6^1, $\frac{15}{2}^4$, 51^2, ∞^{14}	0^{12}, 6^2, $\frac{15}{2}^8$, 34^{105}, 48^4, 51^4, ∞^{36}
114		0^9, 3^2, 6^4, 9^2, 12^1, 48^4, 54^1, 60^1	0^1, 3^2, 9^2, 12^1, 48^1, 54^1, ∞^{16}	0^{10}, 3^4, 6^4, 9^4, 12^2, 36^{118}, 48^5, 54^2, 60^1, ∞^{40}
120		0^7, 3^2, 6^7, 12^1, 36^2, 48^4, 54^1, 75^2, 78^1	0^1, 3^2, 6^3, 12^1, 48^2, 75^2, ∞^{16}	0^8, 3^4, 6^{10}, 12^2, 36^2, 38^{129}, 48^6, 54^1, 75^4, 78^1, ∞^{43}

126		0^8, 3^2, 6^7, 9^2, 30^2, 48^4, 54^1, 72^1, 75^2, 84^1	0^1, 3^2, 6^3, 9^2, 48^2, 54^1, 75^2, ∞^{17}	0^9, 3^4, 6^{10}, 9^4, 30^2, 40^{141}, 48^6, 54^2, 72^1, 75^4, 84^1, ∞^{47}
132		0^9, 3^2, 6^8, 9^2, 12^1, 24^2, 42^1, 48^2, 54^1, 66^1, 75^2, 78^1, 90^1	0^1, 3^2, 6^3, 9^2, 12^1, 48^2, 54^1, 75^2, ∞^{19}	0^{10}, 3^4, 6^{11}, 9^4, 12^2, 24^2, 42^{155}, 48^4, 54^2, 66^1, 75^4, 78^1, 90^1, ∞^{52}
138		0^9, 2^3, 3^4, 6^5, 9^2, 12^1, 18^2, 48^2, 54^1, 60^1, 72^1, 75^2, 90^2, 96^1	2^3, 6^3, 9^2, 12^1, 48^2, 54^1, 75^2, ∞^{22}	0^9, 2^6, 3^4, 6^8, 9^4, 12^2, 18^2, 44^{168}, 48^4, 54^2, 60^1, 72^1, 75^4, 90^2, 96^1, ∞^{58}
144		0^{12}, 4^6, 6^5, 9^2, 12^3, 48^2, 54^1, 66^1, 75^2, 90^3, 96^2	4^6, 9^2, 12^1, 48^2, 54^1, 75^2, ∞^{25}	0^{12}, 4^{12}, 6^5, 9^4, 12^4, 46^{183}, 48^4, 54^2, 66^1, 75^4, 90^3, 96^2, ∞^{64}
150		0^{16}, 6^{11}, 12^3, 48^1, 54^2, 72^2, 90^4, 96^3	0^1, 6^7, 12^1, 48^1, 54^2, 72^2, ∞^{28}	0^{17}, 6^{18}, 12^4, 48^{201}, 54^4, 72^4, 90^4, 96^3, ∞^{70}

Table 31: Slopes for $q = 7$, $i = 2$, type 4. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
3				
9				0^1
15				2^3
21				4^6
27				6^{10}
33		0^1	0^1	0^2, 8^{12}, ∞^1
39		0^1, 6^1	0^1, 6^1	0^2, 6^2, 10^{15}, ∞^2
45		0^1, 6^1, 12^1	0^1, 6^1, 12^1	0^2, 6^2, 12^{21}, ∞^3
51		0^1, 6^1, 12^1, 18^1	0^1, 6^1, 12^1, 18^1	0^2, 6^2, 12^2, 14^{24}, 18^2, ∞^4
57		0^1, 3^2, 12^1, 18^1	3^2, 12^1, 18^1, ∞^1	0^1, 3^4, 12^2, 16^{30}, 18^2, ∞^6
63		0^2, 6^3, 18^1	6^3, 18^1, ∞^2	0^2, 6^6, 18^{39}, ∞^8
69		0^3, 9^4	9^4, ∞^3	0^3, 9^8, 20^{45}, ∞^{10}
75		0^5, 12^3	0^1, 12^3, ∞^4	0^6, 12^6, 22^{54}, ∞^{12}
81		0^4, 3^2, 15^2, 24^1, 48^1	0^1, 3^2, 15^2, 48^1, ∞^4	0^5, 3^4, 15^4, 24^{62}, 48^2, ∞^{14}
87		0^3, 3^2, 6^1, 12^1, 18^2, 30^1, 48^1, 54^1	0^1, 3^2, 6^1, 12^1, 18^1, 48^1, 54^1, ∞^4	0^4, 3^4, 6^2, 12^2, 18^3, 26^{69}, 30^1, 48^2, 54^2, ∞^{16}
93		0^2, 3^2, 6^1, 12^3, 18^1, 24^1, 36^1, 48^1, 54^1, 60^1	0^1, 3^2, 6^1, 12^2, 18^1, 48^1, 54^1, 60^1, ∞^4	0^3, 3^4, 6^2, 12^5, 18^2, 24^1, 28^{78}, 36^1, 48^2, 54^2, 60^2, ∞^{18}
99		0^2, 2^3, 6^2, 12^2, 18^3, 30^1, 48^1, 54^1, 60^1	2^3, 6^1, 12^2, 18^2, 48^1, 54^1, 60^1, ∞^5	0^2, 2^6, 6^3, 12^4, 18^5, 30^{89}, 48^2, 54^2, 60^2, ∞^{21}
105		0^4, 4^3, 6^2, 12^2, 18^2, 24^1, 48^2, 54^1, 60^1	4^3, 6^2, 12^1, 18^2, 48^1, 54^1, 60^1, ∞^7	0^4, 4^6, 6^4, 12^3, 18^4, 24^1, 32^{99}, 48^3, 54^2, 60^2, ∞^{25}
111		0^6, 6^1, $\frac{15}{2}^4$, 9^2, 18^2, 48^2, 51^2, 60^1	6^1, $\frac{15}{2}^4$, 9^2, 18^1, 51^2, 60^1, ∞^9	0^6, 6^2, $\frac{15}{2}^8$, 9^4, 18^3, 34^{111}, $48^{\frac{2}{2}}$, 51^4, 60^2, ∞^{29}
117		0^9, 9^2, $\frac{21}{2}^4$, 12^1, 48^3, 54^3	0^1, 9^2, $\frac{21}{2}^4$, 12^1, 54^3, ∞^{11}	0^{10}, 9^4, $\frac{21}{2}^8$, 12^2, 36^{124}, 48^3, 54^6, ∞^{33}
123		0^7, 3^2, 6^4, 12^3, 15^2, 48^3, 54^1, 57^2	0^1, 3^2, 12^3, 15^2, 48^1, 57^2, ∞^{13}	0^8, 3^4, 6^4, 12^6, 15^4, 38^{138}, 48^4, 54^1, 57^4, ∞^{37}

129		$0^\mathbf{5}$, $3^\mathbf{2}$, $6^\mathbf{7}$, $15^\mathbf{2}$, $18^\mathbf{1}$, $30^\mathbf{2}$, $48^\mathbf{4}$, $60^\mathbf{1}$, $72^\mathbf{1}$, $75^\mathbf{2}$	$0^\mathbf{1}$, $3^\mathbf{2}$, $6^\mathbf{3}$, $15^\mathbf{2}$, $18^\mathbf{1}$, $48^\mathbf{2}$, $60^\mathbf{1}$, $75^\mathbf{2}$, $\infty^\mathbf{13}$	$0^\mathbf{6}$, $3^\mathbf{4}$, $6^\mathbf{10}$, $15^\mathbf{4}$, $18^\mathbf{2}$, $30^\mathbf{2}$, $40^\mathbf{150}$, $48^\mathbf{6}$, $60^\mathbf{2}$, $72^\mathbf{1}$, $75^\mathbf{4}$, $\infty^\mathbf{40}$
135		$0^\mathbf{3}$, $3^\mathbf{2}$, $6^\mathbf{7}$, $9^\mathbf{2}$, $18^\mathbf{2}$, $24^\mathbf{2}$, $36^\mathbf{2}$, $42^\mathbf{1}$, $48^\mathbf{2}$, $54^\mathbf{1}$, $66^\mathbf{1}$, $75^\mathbf{2}$, $78^\mathbf{1}$, $81^\mathbf{2}$	$0^\mathbf{1}$, $3^\mathbf{2}$, $6^\mathbf{3}$, $9^\mathbf{2}$, $18^\mathbf{2}$, $48^\mathbf{2}$, $54^\mathbf{1}$, $75^\mathbf{2}$, $81^\mathbf{2}$, $\infty^\mathbf{13}$	$0^\mathbf{4}$, $3^\mathbf{4}$, $6^\mathbf{10}$, $9^\mathbf{4}$, $18^\mathbf{4}$, $24^\mathbf{2}$, $36^\mathbf{2}$, $42^\mathbf{164}$, $48^\mathbf{4}$, $54^\mathbf{2}$, $66^\mathbf{1}$, $75^\mathbf{4}$, $78^\mathbf{1}$, $81^\mathbf{4}$, $\infty^\mathbf{43}$
141		$0^\mathbf{3}$, $2^\mathbf{3}$, $3^\mathbf{4}$, $6^\mathbf{3}$, $9^\mathbf{2}$, $12^\mathbf{1}$, $18^\mathbf{4}$, $30^\mathbf{2}$, $48^\mathbf{2}$, $54^\mathbf{1}$, $60^\mathbf{2}$, $72^\mathbf{1}$, $75^\mathbf{2}$, $81^\mathbf{2}$, $84^\mathbf{1}$	$2^\mathbf{3}$, $6^\mathbf{3}$, $9^\mathbf{2}$, $12^\mathbf{1}$, $18^\mathbf{2}$, $48^\mathbf{2}$, $54^\mathbf{1}$, $60^\mathbf{1}$, $75^\mathbf{2}$, $81^\mathbf{2}$, $\infty^\mathbf{14}$	$0^\mathbf{3}$, $2^\mathbf{6}$, $3^\mathbf{4}$, $6^\mathbf{6}$, $9^\mathbf{4}$, $12^\mathbf{2}$, $18^\mathbf{6}$, $30^\mathbf{2}$, $44^\mathbf{177}$, $48^\mathbf{4}$, $54^\mathbf{2}$, $60^\mathbf{3}$, $72^\mathbf{1}$, $75^\mathbf{4}$, $81^\mathbf{4}$, $84^\mathbf{1}$, $\infty^\mathbf{47}$
147		$0^\mathbf{6}$, $4^\mathbf{6}$, $6^\mathbf{3}$, $9^\mathbf{2}$, $12^\mathbf{3}$, $18^\mathbf{3}$, $24^\mathbf{2}$, $48^\mathbf{2}$, $54^\mathbf{1}$, $60^\mathbf{1}$, $66^\mathbf{1}$, $75^\mathbf{2}$, $78^\mathbf{1}$, $81^\mathbf{2}$, $90^\mathbf{1}$	$4^\mathbf{6}$, $9^\mathbf{2}$, $12^\mathbf{1}$, $18^\mathbf{3}$, $48^\mathbf{2}$, $54^\mathbf{1}$, $60^\mathbf{1}$, $75^\mathbf{2}$, $81^\mathbf{2}$, $\infty^\mathbf{16}$	$0^\mathbf{6}$, $4^\mathbf{12}$, $6^\mathbf{3}$, $9^\mathbf{4}$, $12^\mathbf{4}$, $18^\mathbf{6}$, $24^\mathbf{2}$, $46^\mathbf{192}$, $48^\mathbf{4}$, $54^\mathbf{2}$, $60^\mathbf{2}$, $66^\mathbf{1}$, $75^\mathbf{4}$, $78^\mathbf{1}$, $81^\mathbf{4}$, $90^\mathbf{1}$, $\infty^\mathbf{52}$

Table 32: Slopes for $q = 7$, $i = 2$, type 5. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
0				
6				
12				0^1
18				2^3
24				4^6
30				6^{10}
36				8^{15}
42		0^1	0^1	0^2, 10^{18}, ∞^1
48		0^1, 6^1	0^1, 6^1	0^2, 6^2, 12^{22}, ∞^2
54		0^1, 6^1, 12^1	0^1, 6^1, 12^1	0^2, 6^2, 12^2, 14^{27}, ∞^3
60		3^2, 12^1, 18^1	3^2, 12^1, 18^1	3^4, 12^2, 16^{33}, 18^2, ∞^4
66		6^3, 18^1, 24^1	6^3, 18^1, 24^1	6^6, 18^{42}, 24^2, ∞^5
72		0^1, 9^4, 24^1	9^4, 24^1, ∞^1	0^1, 9^8, 20^{48}, 24^2, ∞^7
78		0^2, 12^5	12^5, ∞^2	0^2, 12^{10}, 22^{57}, ∞^9
84		0^4, 15^4	0^1, 15^4, ∞^3	0^5, 15^8, 24^{67}, ∞^{11}
90		0^3, 3^2, 18^4, 48^1	0^1, 3^2, 18^3, 48^1, ∞^3	0^4, 3^4, 18^7, 26^{75}, 48^2, ∞^{13}
96		0^2, 3^2, 6^1, 12^2, 21^2, 24^1, 48^1, 54^1	0^1, 3^2, 6^1, 12^1, 21^2, 48^1, 54^1, ∞^3	0^3, 3^4, 6^2, 12^3, 21^4, 24^1, 28^{84}, 48^2, 54^2, ∞^{15}
102		2^3, 6^2, 12^2, 18^2, 24^1, 30^1, 48^1, 54^1, 60^1	2^3, 6^1, 12^2, 18^1, 24^1, 48^1, 54^1, 60^1, ∞^3	2^6, 6^3, 12^4, 18^3, 24^2, 30^{95}, 48^2, 54^2, 60^2, ∞^{17}
108		4^3, 6^2, 12^2, 18^2, 24^2, 36^1, 48^1, 54^1, 60^1, 66^1	4^3, 6^2, 12^1, 18^2, 24^1, 48^1, 54^1, 60^1, 66^1, ∞^3	4^6, 6^4, 12^3, 18^4, 24^3, 32^{105}, 36^1, 48^2, 54^2, 60^2, 66^2, ∞^{19}
114		0^2, 6^1, $\frac{15}{2}^4$, 9^2, 18^2, 24^2, 30^1, 51^2, 60^1, 66^1	6^1, $\frac{15}{2}^4$, 9^2, 18^1, 24^2, 51^2, 60^1, 66^1, ∞^4	0^2, 6^2, $\frac{15}{2}^8$, 9^4, 18^3, 24^4, 30^1, 34^{117}, 51^4, 60^2, 66^2, ∞^{22}
120		0^4, 9^2, $\frac{21}{2}^4$, 12^3, 24^2, 48^1, 54^3, 66^1	9^2, $\frac{21}{2}^4$, 12^3, 24^1, 54^3, 66^1, ∞^6	0^4, 9^4, $\frac{21}{2}^8$, 12^6, 24^3, 36^{130}, 48^1, 54^6, 66^2, ∞^{26}
126		0^7, 12^3, $\frac{27}{2}^4$, 15^2, 48^2, 57^4	0^1, 12^3, $\frac{27}{2}^4$, 15^2, 57^4, ∞^8	0^8, 12^6, $\frac{27}{2}^8$, 15^4, 38^{144}, 48^2, 57^8, ∞^{30}

132		0^5, 3^2, 6^4, 15^4, 18^3, 48^3, 60^3	0^1, 3^2, 15^4, 18^3, 48^1, 60^3, ∞^{10}	0^6, 3^4, 6^4, 15^8, 18^6, 40^{159}, 48^4, 60^6, ∞^{34}
138		0^3, 3^2, 6^7, 18^3, 21^2, 24^2, 42^1, 48^2, 63^2, 66^1, 75^2	0^1, 3^2, 6^3, 18^3, 21^2, 48^2, 63^2, 75^2, ∞^{10}	0^4, 3^4, 6^{10}, 18^6, 21^4, 24^2, 42^{173}, 48^4, 63^4, 66^1, 75^4, ∞^{37}
144		2^3, 3^4, 6^3, 9^2, 18^3, 21^2, 24^1, 30^2, 48^2, 54^1, 60^1, 66^1, 72^1, 75^2, 81^2	2^3, 6^3, 9^2, 18^1, 21^2, 24^1, 48^2, 54^1, 66^1, 75^2, 81^2, ∞^{10}	2^6, 3^4, 6^6, 9^4, 18^4, 21^4, 24^2, 30^2, 44^{186}, 48^4, 54^2, 60^1, 66^2, 72^1, 75^4, 81^4, ∞^{40}
150		4^6, 6^2, 9^2, 12^3, 18^2, 24^4, 36^2, 48^2, 54^1, 60^1, 66^1, 75^2, 78^1, 81^2, 87^2	4^6, 9^2, 12^1, 18^2, 24^2, 48^2, 54^1, 60^1, 75^2, 81^2, 87^2, ∞^{10}	4^{12}, 6^2, 9^4, 12^4, 18^4, 24^6, 36^2, 46^{201}, 48^4, 54^2, 60^2, 66^1, 75^4, 78^1, 81^4, 87^4, ∞^{43}

6 $q = 8$.

6.1 $i = 1$.

Table 33: Slopes for $q = 8$, $i = 1$, type 0. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
4				
11				
18				$0^{\mathbf{1}}$
25				$\frac{14}{3}^{\mathbf{3}}$
32				$\frac{28}{3}^{\mathbf{6}}$
39				$14^{\mathbf{10}}$
46				$\frac{56}{3}^{\mathbf{15}}$
53				$\frac{70}{3}^{\mathbf{21}}$
60				$28^{\mathbf{28}}$
67		$\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\frac{98}{3}^{\mathbf{33}}$, $\infty^{\mathbf{2}}$
74		$\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\frac{112}{3}^{\mathbf{39}}$, $\infty^{\mathbf{5}}$
81		$\infty^{\mathbf{3}}$	$14^{\mathbf{2}}$, $\infty^{\mathbf{1}}$	$14^{\mathbf{2}}$, $42^{\mathbf{46}}$, $\infty^{\mathbf{7}}$
88		$\infty^{\mathbf{4}}$	$14^{\mathbf{2}}$, $\infty^{\mathbf{2}}$	$14^{\mathbf{2}}$, $\frac{140}{3}^{\mathbf{54}}$, $\infty^{\mathbf{10}}$
95		$\infty^{\mathbf{5}}$	$28^{\mathbf{3}}$, $\infty^{\mathbf{2}}$	$28^{\mathbf{3}}$, $\frac{154}{3}^{\mathbf{63}}$, $\infty^{\mathbf{12}}$
102		$\infty^{\mathbf{6}}$	$28^{\mathbf{3}}$, $\infty^{\mathbf{3}}$	$28^{\mathbf{3}}$, $56^{\mathbf{73}}$, $\infty^{\mathbf{15}}$
109		$\infty^{\mathbf{7}}$	$42^{\mathbf{4}}$, $\infty^{\mathbf{3}}$	$42^{\mathbf{4}}$, $\frac{182}{3}^{\mathbf{84}}$, $\infty^{\mathbf{17}}$
116		$49^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$42^{\mathbf{4}}$, $49^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$42^{\mathbf{4}}$, $49^{\mathbf{2}}$, $\frac{196}{3}^{\mathbf{96}}$, $\infty^{\mathbf{18}}$
123		$\frac{105}{2}^{\mathbf{2}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{1}}$, $\frac{105}{2}^{\mathbf{2}}$, $56^{\mathbf{3}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $\frac{105}{2}^{\mathbf{4}}$, $56^{\mathbf{3}}$, $70^{\mathbf{109}}$, $\infty^{\mathbf{19}}$
130		$56^{\mathbf{1}}$, $63^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $7^{\mathbf{2}}$, $56^{\mathbf{4}}$, $63^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $7^{\mathbf{2}}$, $56^{\mathbf{5}}$, $63^{\mathbf{2}}$, $\frac{224}{3}^{\mathbf{120}}$, $\infty^{\mathbf{23}}$
137		$\frac{133}{2}^{\mathbf{2}}$, $\infty^{\mathbf{11}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $28^{\mathbf{1}}$, $\frac{133}{2}^{\mathbf{2}}$, $70^{\mathbf{2}}$, $\infty^{\mathbf{4}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $28^{\mathbf{1}}$, $\frac{133}{2}^{\mathbf{4}}$, $70^{\mathbf{2}}$, $\frac{238}{3}^{\mathbf{132}}$, $\infty^{\mathbf{28}}$
144		$70^{\mathbf{1}}$, $77^{\mathbf{1}}$, $\infty^{\mathbf{13}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $28^{\mathbf{1}}$, $70^{\mathbf{3}}$, $77^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $28^{\mathbf{1}}$, $70^{\mathbf{4}}$, $77^{\mathbf{2}}$, $84^{\mathbf{145}}$, $\infty^{\mathbf{33}}$
151		$\frac{161}{2}^{\mathbf{2}}$, $\infty^{\mathbf{15}}$	$14^{\mathbf{1}}$, $\frac{35}{2}^{\mathbf{4}}$, $28^{\mathbf{2}}$, $\frac{161}{2}^{\mathbf{2}}$, $84^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$14^{\mathbf{1}}$, $\frac{35}{2}^{\mathbf{4}}$, $28^{\mathbf{2}}$, $\frac{161}{2}^{\mathbf{4}}$, $84^{\mathbf{1}}$, $\frac{266}{3}^{\mathbf{159}}$, $\infty^{\mathbf{39}}$
158		$84^{\mathbf{1}}$, $91^{\mathbf{1}}$, $\infty^{\mathbf{17}}$	$21^{\mathbf{2}}$, $28^{\mathbf{3}}$, $35^{\mathbf{4}}$, $84^{\mathbf{2}}$, $91^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$21^{\mathbf{2}}$, $28^{\mathbf{3}}$, $35^{\mathbf{4}}$, $84^{\mathbf{3}}$, $91^{\mathbf{2}}$, $\frac{280}{3}^{\mathbf{174}}$, $\infty^{\mathbf{43}}$

165		$\frac{189}{2}^{\mathbf{2}}$, $\infty^{\mathbf{19}}$	$28^{\mathbf{1}}$, $\frac{98}{3}^{\mathbf{6}}$, $42^{\mathbf{2}}$, $56^{\mathbf{2}}$, $\frac{189}{2}^{\mathbf{2}}$, $\infty^{\mathbf{8}}$	$28^{\mathbf{1}}$, $\frac{98}{3}^{\mathbf{6}}$, $42^{\mathbf{2}}$, $56^{\mathbf{2}}$, $\frac{189}{2}^{\mathbf{4}}$, $98^{\mathbf{190}}$, $\infty^{\mathbf{48}}$
172		$77^{\mathbf{2}}$, $98^{\mathbf{1}}$, $\infty^{\mathbf{20}}$	$\frac{112}{3}^{\mathbf{6}}$, $42^{\mathbf{4}}$, $56^{\mathbf{2}}$, $77^{\mathbf{2}}$, $98^{\mathbf{1}}$, $\infty^{\mathbf{8}}$	$\frac{112}{3}^{\mathbf{6}}$, $42^{\mathbf{4}}$, $56^{\mathbf{2}}$, $77^{\mathbf{4}}$, $98^{\mathbf{2}}$, $\frac{308}{3}^{\mathbf{207}}$, $\infty^{\mathbf{51}}$

Table 34: Slopes for $q = 8$, $i = 1$, type 1. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
0				0^1
7		∞^1	0^1	$0^1, \infty^2$
14		$7^1, \infty^1$	$0^1, 7^1$	$0^1, 7^2, \infty^3$
21		$\frac{21}{2}^2, \infty^1$	$0^1, \frac{21}{2}^2$	$0^1, \frac{21}{2}^4, 14^1, \infty^4$
28		$14^3, \infty^1$	$0^1, 14^3$	$0^1, 14^6, \frac{56}{3}^3, \infty^5$
35		$\frac{35}{2}^4, \infty^1$	$0^1, \frac{35}{2}^4$	$0^1, \frac{35}{2}^8, \frac{70}{3}^6, \infty^6$
42		$21^5, \infty^1$	$0^1, 21^5$	$0^1, 21^{10}, 28^{10}, \infty^7$
49		$\frac{49}{2}^6, \infty^1$	$0^1, \frac{49}{2}^6$	$0^1, \frac{49}{2}^{12}, \frac{98}{3}^{15}, \infty^8$
56		$28^7, \infty^1$	$0^1, 28^7$	$0^1, 28^{14}, \frac{112}{3}^{21}, \infty^9$
63		$\frac{63}{2}^8, \infty^1$	$0^1, \frac{63}{2}^8$	$0^1, \frac{63}{2}^{16}, 42^{28}, \infty^{10}$
70	7^1	$7^1, 35^7, \infty^3$	$0^1, 7^2, 35^7, \infty^1$	$0^1, 7^2, 35^{14}, \frac{140}{3}^{36}, \infty^{13}$
77	14^1	$14^1, \frac{77}{2}^8, \infty^4$	$0^1, 14^3, \frac{77}{2}^8, \infty^1$	$0^1, 14^3, \frac{77}{2}^{16}, \frac{154}{3}^{42}, \infty^{16}$
84	21^1	$21^1, 42^9, \infty^5$	$0^1, 21^4, 42^9, \infty^1$	$0^1, 21^4, 42^{18}, 56^{49}, \infty^{19}$
91	28^1	$28^1, \frac{91}{2}^{10}, \infty^6$	$0^1, 28^5, \frac{91}{2}^{10}, \infty^1$	$0^1, 28^5, \frac{91}{2}^{20}, \frac{182}{3}^{57}, \infty^{22}$
98	35^1	$35^1, 49^{11}, \infty^7$	$0^1, 35^6, 49^{11}, \infty^1$	$0^1, 35^6, 49^{22}, \frac{196}{3}^{66}, \infty^{25}$
105	42^1	$42^1, \frac{105}{2}^{12}, \infty^8$	$0^1, 42^7, \frac{105}{2}^{12}, \infty^1$	$0^1, 42^7, \frac{105}{2}^{24}, 70^{76}, \infty^{28}$
112	49^1	$49^1, 56^{13}, \infty^9$	$0^1, 49^8, 56^{13}, \infty^1$	$0^1, 49^8, 56^{26}, \frac{224}{3}^{87}, \infty^{31}$
119	56^1	$56^1, \frac{119}{2}^{14}, \infty^{10}$	$0^1, 56^9, \frac{119}{2}^{14}, \infty^1$	$0^1, 56^9, \frac{119}{2}^{28}, \frac{238}{3}^{99}, \infty^{34}$
126	7^1	$7^1, 63^{15}, \infty^{11}$	$0^1, 7^2, 63^{23}, \infty^1$	$0^1, 7^2, 63^{38}, 84^{112}, \infty^{37}$
133	$\frac{21}{2}^2$	$\frac{21}{2}^2, \frac{133}{2}^{14}, 70^1, \infty^{13}$	$0^1, \frac{21}{2}^4, 14^1, \frac{133}{2}^{14}, 70^8, \infty^2$	$0^1, \frac{21}{2}^4, 14^1, \frac{133}{2}^{28}, 70^9, \frac{266}{3}^{126}, \infty^{41}$
140	$14^1, 21^1$	$14^1, 21^1, 70^{15}, 77^1, \infty^{15}$	$0^1, 14^2, \frac{56}{3}^3, 21^2, 70^{15}, 77^7, 140^1, \infty^2$	$0^1, 14^2, \frac{56}{3}^3, 21^2, 70^{30}, 77^8, \frac{280}{3}^{138}, 140^1, \infty^{46}$
147	$\frac{49}{2}^2$	$\frac{49}{2}^2, \frac{147}{2}^{16}, 84^1, \infty^{17}$	$0^1, \frac{70}{3}^3, \frac{49}{2}^4, 28^2, \frac{147}{2}^{16}, 84^6, 140^1, \infty^3$	$0^1, \frac{70}{3}^3, \frac{49}{2}^4, 28^2, \frac{147}{2}^{32}, 84^7, 98^{151}, 140^1, \infty^{52}$
154	$28^1, 35^1$	$28^1, 35^1, 77^{17}, 91^1, \infty^{19}$	$0^1, 28^3, \frac{98}{3}^6, 35^2, 77^{17}, 91^5, 154^2, \infty^3$	$0^1, 28^3, \frac{98}{3}^6, 35^2, 77^{34}, 91^6, \frac{308}{3}^{165}, 154^2, \infty^{57}$
161	$\frac{77}{2}^2$	$\frac{77}{2}^2, \frac{161}{2}^{18}, 98^1, \infty^{21}$	$0^1, \frac{112}{3}^6, \frac{77}{2}^4, 42^3, \frac{161}{2}^{18}, 98^4, 154^2, \infty^4$	$0^1, \frac{112}{3}^6, \frac{77}{2}^4, 42^3, \frac{161}{2}^{36}, 98^5, \frac{322}{3}^{180}, 154^2, \infty^{63}$

168	$42^{\mathbf{1}}$, $49^{\mathbf{1}}$	$42^{\mathbf{1}}$, $49^{\mathbf{1}}$, $84^{\mathbf{19}}$, $105^{\mathbf{1}}$, $\infty^{\mathbf{23}}$	$0^{\mathbf{1}}$, $42^{\mathbf{4}}$, $\frac{140}{3}^{\mathbf{9}}$, $49^{\mathbf{2}}$, $84^{\mathbf{19}}$, $105^{\mathbf{3}}$, $168^{\mathbf{3}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $42^{\mathbf{4}}$, $\frac{140}{3}^{\mathbf{9}}$, $49^{\mathbf{2}}$, $84^{\mathbf{38}}$, $105^{\mathbf{4}}$, $112^{\mathbf{196}}$, $168^{\mathbf{3}}$, $\infty^{\mathbf{68}}$
175	$\frac{105}{2}^{\mathbf{2}}$	$\frac{105}{2}^{\mathbf{2}}$, $\frac{175}{2}^{\mathbf{20}}$, $112^{\mathbf{1}}$, $\infty^{\mathbf{25}}$	$0^{\mathbf{1}}$, $\frac{154}{3}^{\mathbf{9}}$, $\frac{105}{2}^{\mathbf{4}}$, $56^{\mathbf{4}}$, $\frac{175}{2}^{\mathbf{20}}$, $112^{\mathbf{2}}$, $168^{\mathbf{3}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $\frac{154}{3}^{\mathbf{9}}$, $\frac{105}{2}^{\mathbf{4}}$, $56^{\mathbf{4}}$, $\frac{175}{2}^{\mathbf{40}}$, $112^{\mathbf{3}}$, $\frac{350}{3}^{\mathbf{213}}$, $168^{\mathbf{3}}$, $\infty^{\mathbf{74}}$

Table 35: Slopes for $q = 8$, $i = 1$, type 2. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
3				$0^{\mathbf{1}}$
10				$\frac{14}{3}^{\mathbf{3}}$
17		$\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $\infty^{\mathbf{2}}$
24		$\infty^{\mathbf{2}}$	$7^{\mathbf{2}}$	$7^{\mathbf{2}}$, $14^{\mathbf{4}}$, $\infty^{\mathbf{4}}$
31		$14^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $14^{\mathbf{2}}$	$0^{\mathbf{1}}$, $14^{\mathbf{3}}$, $\frac{56}{3}^{\mathbf{6}}$, $\infty^{\mathbf{5}}$
38		$21^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$7^{\mathbf{2}}$, $21^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$7^{\mathbf{2}}$, $21^{\mathbf{2}}$, $\frac{70}{3}^{\mathbf{9}}$, $\infty^{\mathbf{8}}$
45		$21^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $21^{\mathbf{2}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $21^{\mathbf{4}}$, $28^{\mathbf{13}}$, $\infty^{\mathbf{9}}$
52		$28^{\mathbf{2}}$, $\infty^{\mathbf{4}}$	$7^{\mathbf{2}}$, $28^{\mathbf{2}}$, $\infty^{\mathbf{2}}$	$7^{\mathbf{2}}$, $28^{\mathbf{4}}$, $\frac{98}{3}^{\mathbf{18}}$, $\infty^{\mathbf{12}}$
59		$28^{\mathbf{3}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $28^{\mathbf{3}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $28^{\mathbf{6}}$, $\frac{112}{3}^{\mathbf{24}}$, $\infty^{\mathbf{13}}$
66		$35^{\mathbf{3}}$, $\infty^{\mathbf{5}}$	$7^{\mathbf{2}}$, $35^{\mathbf{3}}$, $\infty^{\mathbf{3}}$	$7^{\mathbf{2}}$, $35^{\mathbf{6}}$, $42^{\mathbf{31}}$, $\infty^{\mathbf{16}}$
73		$35^{\mathbf{4}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $35^{\mathbf{4}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $35^{\mathbf{8}}$, $\frac{140}{3}^{\mathbf{39}}$, $\infty^{\mathbf{17}}$
80		$42^{\mathbf{4}}$, $\infty^{\mathbf{7}}$	$\frac{14}{3}^{\mathbf{3}}$, $42^{\mathbf{4}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$\frac{14}{3}^{\mathbf{3}}$, $42^{\mathbf{8}}$, $\frac{154}{3}^{\mathbf{45}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{21}}$
87		$42^{\mathbf{5}}$, $\infty^{\mathbf{8}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $42^{\mathbf{5}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $42^{\mathbf{10}}$, $56^{\mathbf{52}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{24}}$
94		$\frac{189}{4}^{\mathbf{4}}$, $49^{\mathbf{3}}$, $\infty^{\mathbf{8}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $\frac{189}{4}^{\mathbf{4}}$, $49^{\mathbf{3}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $\frac{189}{4}^{\mathbf{8}}$, $49^{\mathbf{6}}$, $\frac{182}{3}^{\mathbf{60}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{26}}$
101		$49^{\mathbf{6}}$, $\frac{105}{2}^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $49^{\mathbf{6}}$, $\frac{105}{2}^{\mathbf{2}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $49^{\mathbf{12}}$, $\frac{105}{2}^{\mathbf{4}}$, $\frac{196}{3}^{\mathbf{69}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{30}}$
108		$\frac{217}{4}^{\mathbf{8}}$, $56^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $\frac{217}{4}^{\mathbf{8}}$, $56^{\mathbf{2}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $\frac{217}{4}^{\mathbf{16}}$, $56^{\mathbf{4}}$, $70^{\mathbf{79}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{32}}$
115		$56^{\mathbf{7}}$, $\frac{119}{2}^{\mathbf{4}}$, $\infty^{\mathbf{10}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $56^{\mathbf{7}}$, $\frac{119}{2}^{\mathbf{4}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $56^{\mathbf{14}}$, $\frac{119}{2}^{\mathbf{8}}$, $\frac{224}{3}^{\mathbf{90}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{36}}$
122		$\frac{245}{4}^{\mathbf{12}}$, $63^{\mathbf{1}}$, $\infty^{\mathbf{10}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $\frac{245}{4}^{\mathbf{12}}$, $63^{\mathbf{1}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $\frac{245}{4}^{\mathbf{24}}$, $63^{\mathbf{2}}$, $\frac{238}{3}^{\mathbf{102}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{38}}$
129		$63^{\mathbf{8}}$, $\frac{133}{2}^{\mathbf{6}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $63^{\mathbf{8}}$, $\frac{133}{2}^{\mathbf{6}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{6}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $63^{\mathbf{16}}$, $\frac{133}{2}^{\mathbf{12}}$, $84^{\mathbf{115}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{42}}$
136		$\frac{273}{4}^{\mathbf{16}}$, $\infty^{\mathbf{11}}$	$7^{\mathbf{2}}$, $14^{\mathbf{1}}$, $63^{\mathbf{2}}$, $\frac{273}{4}^{\mathbf{16}}$, $\infty^{\mathbf{6}}$	$7^{\mathbf{2}}$, $14^{\mathbf{1}}$, $63^{\mathbf{2}}$, $\frac{273}{4}^{\mathbf{32}}$, $\frac{266}{3}^{\mathbf{129}}$, $\infty^{\mathbf{44}}$
143	$14^{\mathbf{1}}$	$14^{\mathbf{1}}$, $70^{\mathbf{7}}$, $\frac{147}{2}^{\mathbf{8}}$, $\infty^{\mathbf{14}}$	$0^{\mathbf{1}}$, $14^{\mathbf{3}}$, $\frac{133}{2}^{\mathbf{4}}$, $70^{\mathbf{7}}$, $\frac{147}{2}^{\mathbf{8}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{1}}$, $14^{\mathbf{3}}$, $\frac{133}{2}^{\mathbf{4}}$, $70^{\mathbf{14}}$, $\frac{147}{2}^{\mathbf{16}}$, $\frac{280}{3}^{\mathbf{144}}$, $\infty^{\mathbf{49}}$

150	21^1	$21^1, \frac{224}{3}^3, \frac{301}{4}^{12}, 133^1, \infty^{16}$	$7^2, 21^4, 63^2, 70^2, \frac{224}{3}^3, \frac{301}{4}^{12}, 133^1, \infty^7$	$7^2, 21^4, 63^2, 70^2, \frac{224}{3}^6, \frac{301}{4}^{24}, 98^{157}, 133^2, \infty^{54}$
157	28^1	$28^1, 77^8, \frac{238}{3}^3, \frac{161}{2}^6, 140^1, \infty^{17}$	$0^1, 14^1, 28^5, \frac{133}{2}^4, 77^8, \frac{238}{3}^3, \frac{161}{2}^6, 140^1, \infty^7$	$0^1, 14^1, 28^5, \frac{133}{2}^4, 77^{16}, \frac{238}{3}^6, \frac{161}{2}^{12}, \frac{308}{3}^{171}, 140^2, \infty^{58}$
164	35^1	$35^1, \frac{245}{3}^6, \frac{329}{4}^8, 84^3, 140^2, \infty^{19}$	$7^2, 35^6, 63^2, 70^2, \frac{245}{3}^6, \frac{329}{4}^8, 84^3, 140^2, \infty^8$	$7^2, 35^6, 63^2, 70^2, \frac{245}{3}^{12}, \frac{329}{4}^{16}, 84^6, \frac{322}{3}^{186}, 140^4, \infty^{64}$
171	42^1	$42^1, 84^9, \frac{259}{3}^6, \frac{175}{2}^4, 147^2, \infty^{20}$	$0^1, 14^1, 42^7, \frac{133}{2}^4, 84^9, \frac{259}{3}^6, \frac{175}{2}^4, 147^2, \infty^8$	$0^1, 14^1, 42^7, \frac{133}{2}^4, 84^{18}, \frac{259}{3}^{12}, \frac{175}{2}^8, 112^{202}, 147^4, \infty^{68}$

Table 36: Slopes for $q = 8$, $i = 1$, type 3. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
6				$0^{\mathbf{1}}$
13				$\frac{14}{3}^{\mathbf{3}}$
20				$\frac{28}{3}^{\mathbf{6}}$
27		$\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{1}}$, $14^{\mathbf{7}}$, $\infty^{\mathbf{2}}$
34		$\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\frac{56}{3}^{\mathbf{9}}$, $\infty^{\mathbf{5}}$
41		$\infty^{\mathbf{3}}$	$14^{\mathbf{2}}$, $\infty^{\mathbf{1}}$	$14^{\mathbf{2}}$, $\frac{70}{3}^{\mathbf{12}}$, $\infty^{\mathbf{7}}$
48		$21^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$14^{\mathbf{2}}$, $21^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$14^{\mathbf{2}}$, $21^{\mathbf{2}}$, $28^{\mathbf{16}}$, $\infty^{\mathbf{8}}$
55		$\frac{49}{2}^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $\frac{49}{2}^{\mathbf{2}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\frac{49}{2}^{\mathbf{4}}$, $28^{\mathbf{1}}$, $\frac{98}{3}^{\mathbf{21}}$, $\infty^{\mathbf{9}}$
62		$28^{\mathbf{1}}$, $35^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $28^{\mathbf{2}}$, $35^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $28^{\mathbf{3}}$, $35^{\mathbf{2}}$, $\frac{112}{3}^{\mathbf{27}}$, $\infty^{\mathbf{12}}$
69		$\frac{77}{2}^{\mathbf{2}}$, $\infty^{\mathbf{5}}$	$14^{\mathbf{2}}$, $\frac{77}{2}^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$14^{\mathbf{2}}$, $\frac{77}{2}^{\mathbf{4}}$, $42^{\mathbf{34}}$, $\infty^{\mathbf{15}}$
76		$35^{\mathbf{2}}$, $42^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$14^{\mathbf{2}}$, $35^{\mathbf{2}}$, $42^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$14^{\mathbf{2}}$, $35^{\mathbf{4}}$, $42^{\mathbf{2}}$, $\frac{140}{3}^{\mathbf{42}}$, $\infty^{\mathbf{16}}$
83		$\frac{77}{2}^{\mathbf{4}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $28^{\mathbf{1}}$, $\frac{77}{2}^{\mathbf{4}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $28^{\mathbf{1}}$, $\frac{77}{2}^{\mathbf{8}}$, $\frac{154}{3}^{\mathbf{51}}$, $\infty^{\mathbf{17}}$
90		$42^{\mathbf{2}}$, $49^{\mathbf{2}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{1}}$, $7^{\mathbf{2}}$, $28^{\mathbf{1}}$, $42^{\mathbf{2}}$, $49^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $7^{\mathbf{2}}$, $28^{\mathbf{1}}$, $42^{\mathbf{4}}$, $49^{\mathbf{4}}$, $56^{\mathbf{58}}$, $\infty^{\mathbf{21}}$
97		$\frac{105}{2}^{\mathbf{4}}$, $\infty^{\mathbf{9}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $28^{\mathbf{1}}$, $\frac{105}{2}^{\mathbf{4}}$, $\infty^{\mathbf{4}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $28^{\mathbf{1}}$, $\frac{105}{2}^{\mathbf{8}}$, $\frac{182}{3}^{\mathbf{66}}$, $\infty^{\mathbf{26}}$
104		$49^{\mathbf{3}}$, $56^{\mathbf{2}}$, $\infty^{\mathbf{10}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $28^{\mathbf{1}}$, $49^{\mathbf{3}}$, $56^{\mathbf{2}}$, $\infty^{\mathbf{4}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $28^{\mathbf{1}}$, $49^{\mathbf{6}}$, $56^{\mathbf{4}}$, $\frac{196}{3}^{\mathbf{75}}$, $\infty^{\mathbf{29}}$
111		$\frac{105}{2}^{\mathbf{6}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $\frac{35}{2}^{\mathbf{4}}$, $\frac{105}{2}^{\mathbf{6}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $\frac{35}{2}^{\mathbf{4}}$, $\frac{105}{2}^{\mathbf{12}}$, $70^{\mathbf{85}}$, $\infty^{\mathbf{33}}$
118		$56^{\mathbf{3}}$, $\frac{119}{2}^{\mathbf{4}}$, $63^{\mathbf{1}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{1}}$, $7^{\mathbf{2}}$, $21^{\mathbf{2}}$, $28^{\mathbf{1}}$, $56^{\mathbf{3}}$, $\frac{119}{2}^{\mathbf{4}}$, $63^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $7^{\mathbf{2}}$, $21^{\mathbf{2}}$, $28^{\mathbf{1}}$, $56^{\mathbf{6}}$, $\frac{119}{2}^{\mathbf{8}}$, $63^{\mathbf{2}}$, $\frac{224}{3}^{\mathbf{96}}$, $\infty^{\mathbf{35}}$
125		$63^{\mathbf{4}}$, $\frac{133}{2}^{\mathbf{4}}$, $\infty^{\mathbf{13}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $28^{\mathbf{2}}$, $63^{\mathbf{4}}$, $\frac{133}{2}^{\mathbf{4}}$, $\infty^{\mathbf{7}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $28^{\mathbf{2}}$, $63^{\mathbf{8}}$, $\frac{133}{2}^{\mathbf{8}}$, $\frac{238}{3}^{\mathbf{108}}$, $\infty^{\mathbf{41}}$
132		$63^{\mathbf{4}}$, $70^{\mathbf{5}}$, $\infty^{\mathbf{14}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $28^{\mathbf{1}}$, $63^{\mathbf{4}}$, $70^{\mathbf{5}}$, $\infty^{\mathbf{8}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $28^{\mathbf{1}}$, $63^{\mathbf{8}}$, $70^{\mathbf{10}}$, $84^{\mathbf{121}}$, $\infty^{\mathbf{45}}$
139		$\frac{133}{2}^{\mathbf{8}}$, $\frac{147}{2}^{\mathbf{2}}$, $\infty^{\mathbf{15}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $\frac{35}{2}^{\mathbf{4}}$, $\frac{133}{2}^{\mathbf{8}}$, $\frac{147}{2}^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $\frac{35}{2}^{\mathbf{4}}$, $\frac{133}{2}^{\mathbf{16}}$, $\frac{147}{2}^{\mathbf{4}}$, $\frac{266}{3}^{\mathbf{135}}$, $\infty^{\mathbf{49}}$
146		$70^{\mathbf{4}}$, $\frac{147}{2}^{\mathbf{8}}$, $\infty^{\mathbf{15}}$	$0^{\mathbf{1}}$, $21^{\mathbf{2}}$, $28^{\mathbf{1}}$, $63^{\mathbf{2}}$, $70^{\mathbf{4}}$, $\frac{147}{2}^{\mathbf{8}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $21^{\mathbf{2}}$, $28^{\mathbf{1}}$, $63^{\mathbf{2}}$, $70^{\mathbf{8}}$, $\frac{147}{2}^{\mathbf{16}}$, $\frac{280}{3}^{\mathbf{150}}$, $\infty^{\mathbf{51}}$
153		$77^{\mathbf{8}}$, $\frac{161}{2}^{\mathbf{4}}$, $\infty^{\mathbf{18}}$	$\frac{28}{3}^{\mathbf{3}}$, $28^{\mathbf{1}}$, $70^{\mathbf{4}}$, $77^{\mathbf{8}}$, $\frac{161}{2}^{\mathbf{4}}$, $252^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$\frac{28}{3}^{\mathbf{3}}$, $28^{\mathbf{1}}$, $70^{\mathbf{4}}$, $77^{\mathbf{16}}$, $\frac{161}{2}^{\mathbf{8}}$, $98^{\mathbf{163}}$, $252^{\mathbf{1}}$, $\infty^{\mathbf{57}}$

160		$77^{5}, 84^{8}, \infty^{20}$	$\frac{28}{3}^{3}, 70^{4}, 77^{7}, 84^{8}, 252^{1}, \infty^{10}$	$\frac{28}{3}^{3}, 70^{4}, 77^{12}, 84^{16}, \frac{308}{3}^{177}, 252^{1}, \infty^{63}$
167		$\frac{161}{2}^{10}, 84^{1}, \frac{175}{2}^{4}, \infty^{21}$	$0^{1}, \frac{56}{3}^{3}, 70^{2}, 77^{4}, \frac{161}{2}^{10}, 84^{1}, \frac{175}{2}^{4}, 252^{1}, \infty^{10}$	$0^{1}, \frac{56}{3}^{3}, 70^{2}, 77^{4}, \frac{161}{2}^{20}, 84^{2}, \frac{175}{2}^{8}, \frac{322}{3}^{192}, 252^{1}, \infty^{67}$
174		$84^{5}, \frac{343}{4}^{4}, \frac{175}{2}^{8}, \infty^{22}$	$0^{1}, \frac{56}{3}^{3}, 63^{2}, 77^{4}, 84^{5}, \frac{343}{4}^{4}, \frac{175}{2}^{8}, 252^{1}, \infty^{11}$	$0^{1}, \frac{56}{3}^{3}, 63^{2}, 77^{4}, 84^{10}, \frac{343}{4}^{8}, \frac{175}{2}^{16}, 112^{208}, 252^{1}, \infty^{72}$

Table 37: Slopes for $q = 8$, $i = 1$, type 4. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
2				
9				$0^{\mathbf{1}}$
16				$\frac{14}{3}^{\mathbf{3}}$
23				$\frac{28}{3}^{\mathbf{6}}$
30				$14^{\mathbf{10}}$
37		$\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\frac{56}{3}^{\mathbf{12}}$, $\infty^{\mathbf{2}}$
44		$\infty^{\mathbf{2}}$	$7^{\mathbf{2}}$	$7^{\mathbf{2}}$, $\frac{70}{3}^{\mathbf{15}}$, $\infty^{\mathbf{4}}$
51		$\infty^{\mathbf{3}}$	$14^{\mathbf{3}}$	$14^{\mathbf{3}}$, $28^{\mathbf{19}}$, $\infty^{\mathbf{6}}$
58		$\infty^{\mathbf{4}}$	$21^{\mathbf{4}}$	$21^{\mathbf{4}}$, $\frac{98}{3}^{\mathbf{24}}$, $\infty^{\mathbf{8}}$
65		$28^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $28^{\mathbf{4}}$	$0^{\mathbf{1}}$, $28^{\mathbf{5}}$, $\frac{112}{3}^{\mathbf{30}}$, $\infty^{\mathbf{9}}$
72		$35^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$7^{\mathbf{2}}$, $35^{\mathbf{3}}$, $\infty^{\mathbf{1}}$	$7^{\mathbf{2}}$, $35^{\mathbf{4}}$, $42^{\mathbf{37}}$, $\infty^{\mathbf{12}}$
79		$42^{\mathbf{1}}$, $\infty^{\mathbf{6}}$	$14^{\mathbf{3}}$, $42^{\mathbf{2}}$, $\infty^{\mathbf{2}}$	$14^{\mathbf{3}}$, $42^{\mathbf{3}}$, $\frac{140}{3}^{\mathbf{45}}$, $\infty^{\mathbf{15}}$
86		$49^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$21^{\mathbf{4}}$, $49^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$21^{\mathbf{4}}$, $49^{\mathbf{2}}$, $\frac{154}{3}^{\mathbf{54}}$, $\infty^{\mathbf{18}}$
93		$42^{\mathbf{2}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{1}}$, $28^{\mathbf{3}}$, $42^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $28^{\mathbf{3}}$, $42^{\mathbf{4}}$, $56^{\mathbf{64}}$, $\infty^{\mathbf{19}}$
100		$49^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$\frac{14}{3}^{\mathbf{3}}$, $35^{\mathbf{2}}$, $49^{\mathbf{2}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$\frac{14}{3}^{\mathbf{3}}$, $35^{\mathbf{2}}$, $49^{\mathbf{4}}$, $\frac{182}{3}^{\mathbf{72}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{23}}$
107		$56^{\mathbf{2}}$, $\infty^{\mathbf{11}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $42^{\mathbf{1}}$, $56^{\mathbf{2}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $42^{\mathbf{1}}$, $56^{\mathbf{4}}$, $\frac{196}{3}^{\mathbf{81}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{28}}$
114		$63^{\mathbf{2}}$, $\infty^{\mathbf{13}}$	$14^{\mathbf{1}}$, $\frac{56}{3}^{\mathbf{6}}$, $63^{\mathbf{2}}$, $140^{\mathbf{2}}$, $\infty^{\mathbf{4}}$	$14^{\mathbf{1}}$, $\frac{56}{3}^{\mathbf{6}}$, $63^{\mathbf{4}}$, $70^{\mathbf{91}}$, $140^{\mathbf{2}}$, $\infty^{\mathbf{32}}$
121		$56^{\mathbf{3}}$, $\infty^{\mathbf{14}}$	$0^{\mathbf{1}}$, $\frac{70}{3}^{\mathbf{6}}$, $28^{\mathbf{1}}$, $56^{\mathbf{3}}$, $140^{\mathbf{2}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $\frac{70}{3}^{\mathbf{6}}$, $28^{\mathbf{1}}$, $56^{\mathbf{6}}$, $\frac{224}{3}^{\mathbf{102}}$, $140^{\mathbf{2}}$, $\infty^{\mathbf{35}}$
128		$\frac{245}{4}^{\mathbf{4}}$, $63^{\mathbf{1}}$, $\infty^{\mathbf{14}}$	$\frac{14}{3}^{\mathbf{3}}$, $28^{\mathbf{2}}$, $\frac{98}{3}^{\mathbf{3}}$, $\frac{245}{4}^{\mathbf{4}}$, $63^{\mathbf{1}}$, $126^{\mathbf{1}}$, $154^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$\frac{14}{3}^{\mathbf{3}}$, $28^{\mathbf{2}}$, $\frac{98}{3}^{\mathbf{3}}$, $\frac{245}{4}^{\mathbf{8}}$, $63^{\mathbf{2}}$, $\frac{238}{3}^{\mathbf{114}}$, $126^{\mathbf{1}}$, $154^{\mathbf{1}}$, $\infty^{\mathbf{37}}$
135		$\frac{133}{2}^{\mathbf{2}}$, $70^{\mathbf{3}}$, $\infty^{\mathbf{16}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $\frac{112}{3}^{\mathbf{3}}$, $\frac{133}{2}^{\mathbf{2}}$, $70^{\mathbf{3}}$, $126^{\mathbf{1}}$, $154^{\mathbf{1}}$, $\infty^{\mathbf{6}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $\frac{112}{3}^{\mathbf{3}}$, $\frac{133}{2}^{\mathbf{4}}$, $70^{\mathbf{6}}$, $84^{\mathbf{127}}$, $126^{\mathbf{1}}$, $154^{\mathbf{1}}$, $\infty^{\mathbf{43}}$
142		$\frac{301}{4}^{\mathbf{4}}$, $77^{\mathbf{1}}$, $\infty^{\mathbf{18}}$	$14^{\mathbf{1}}$, $\frac{56}{3}^{\mathbf{6}}$, $42^{\mathbf{1}}$, $\frac{301}{4}^{\mathbf{4}}$, $77^{\mathbf{1}}$, $140^{\mathbf{2}}$, $\infty^{\mathbf{8}}$	$14^{\mathbf{1}}$, $\frac{56}{3}^{\mathbf{6}}$, $42^{\mathbf{1}}$, $\frac{301}{4}^{\mathbf{8}}$, $77^{\mathbf{2}}$, $\frac{266}{3}^{\mathbf{141}}$, $140^{\mathbf{2}}$, $\infty^{\mathbf{49}}$
149		$70^{\mathbf{4}}$, $\frac{161}{2}^{\mathbf{2}}$, $\infty^{\mathbf{19}}$	$0^{\mathbf{1}}$, $\frac{70}{3}^{\mathbf{6}}$, $28^{\mathbf{1}}$, $70^{\mathbf{4}}$, $\frac{161}{2}^{\mathbf{2}}$, $140^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $\frac{70}{3}^{\mathbf{6}}$, $28^{\mathbf{1}}$, $70^{\mathbf{8}}$, $\frac{161}{2}^{\mathbf{4}}$, $\frac{280}{3}^{\mathbf{156}}$, $140^{\mathbf{2}}$, $\infty^{\mathbf{53}}$

156		$\frac{301}{4}^{\mathbf{8}}$, $\infty^{\mathbf{19}}$	$7^{\mathbf{2}}$, $28^{\mathbf{2}}$, $\frac{98}{3}^{\mathbf{3}}$, $63^{\mathbf{2}}$, $\frac{301}{4}^{\mathbf{8}}$, $154^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$7^{\mathbf{2}}$, $28^{\mathbf{2}}$, $\frac{98}{3}^{\mathbf{3}}$, $63^{\mathbf{2}}$, $\frac{301}{4}^{\mathbf{16}}$, $98^{\mathbf{172}}$, $154^{\mathbf{1}}$, $\infty^{\mathbf{55}}$
163		$\frac{161}{2}^{\mathbf{4}}$, $84^{\mathbf{4}}$, $\infty^{\mathbf{22}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $\frac{112}{3}^{\mathbf{3}}$, $\frac{133}{2}^{\mathbf{4}}$, $\frac{161}{2}^{\mathbf{4}}$, $84^{\mathbf{4}}$, $154^{\mathbf{1}}$, $252^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $\frac{112}{3}^{\mathbf{3}}$, $\frac{133}{2}^{\mathbf{4}}$, $\frac{161}{2}^{\mathbf{8}}$, $84^{\mathbf{8}}$, $\frac{308}{3}^{\mathbf{186}}$, $154^{\mathbf{1}}$, $252^{\mathbf{1}}$, $\infty^{\mathbf{61}}$
170		$\frac{357}{4}^{\mathbf{8}}$, $\infty^{\mathbf{25}}$	$\frac{49}{3}^{\mathbf{6}}$, $42^{\mathbf{1}}$, $70^{\mathbf{2}}$, $77^{\mathbf{4}}$, $\frac{357}{4}^{\mathbf{8}}$, $259^{\mathbf{2}}$, $\infty^{\mathbf{10}}$	$\frac{49}{3}^{\mathbf{6}}$, $42^{\mathbf{1}}$, $70^{\mathbf{2}}$, $77^{\mathbf{4}}$, $\frac{357}{4}^{\mathbf{16}}$, $\frac{322}{3}^{\mathbf{201}}$, $259^{\mathbf{2}}$, $\infty^{\mathbf{68}}$

Table 38: Slopes for $q = 8$, $i = 1$, type 5. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
5				
12				$0^{\mathbf{1}}$
19				$\frac{14}{3}^{\mathbf{3}}$
26				$\frac{28}{3}^{\mathbf{6}}$
33				$14^{\mathbf{10}}$
40				$\frac{56}{3}^{\mathbf{15}}$
47		$\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\frac{70}{3}^{\mathbf{18}}$, $\infty^{\mathbf{2}}$
54		$\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $28^{\mathbf{22}}$, $\infty^{\mathbf{5}}$
61		$\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $\frac{98}{3}^{\mathbf{27}}$, $\infty^{\mathbf{8}}$
68		$\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $\frac{112}{3}^{\mathbf{33}}$, $\infty^{\mathbf{11}}$
75		$\infty^{\mathbf{5}}$	$28^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$28^{\mathbf{2}}$, $42^{\mathbf{40}}$, $\infty^{\mathbf{13}}$
82		$35^{\mathbf{1}}$, $\infty^{\mathbf{5}}$	$28^{\mathbf{2}}$, $35^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$28^{\mathbf{2}}$, $35^{\mathbf{2}}$, $\frac{140}{3}^{\mathbf{48}}$, $\infty^{\mathbf{14}}$
89		$\frac{77}{2}^{\mathbf{2}}$, $\infty^{\mathbf{5}}$	$28^{\mathbf{2}}$, $\frac{77}{2}^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$28^{\mathbf{2}}$, $\frac{77}{2}^{\mathbf{4}}$, $\frac{154}{3}^{\mathbf{57}}$, $\infty^{\mathbf{15}}$
96		$42^{\mathbf{3}}$, $\infty^{\mathbf{5}}$	$28^{\mathbf{2}}$, $42^{\mathbf{3}}$, $\infty^{\mathbf{3}}$	$28^{\mathbf{2}}$, $42^{\mathbf{6}}$, $56^{\mathbf{67}}$, $\infty^{\mathbf{16}}$
103		$\frac{91}{2}^{\mathbf{4}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $\frac{91}{2}^{\mathbf{4}}$, $56^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $\frac{91}{2}^{\mathbf{8}}$, $56^{\mathbf{1}}$, $\frac{182}{3}^{\mathbf{78}}$, $\infty^{\mathbf{17}}$
110		$49^{\mathbf{3}}$, $63^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{1}}$, $7^{\mathbf{2}}$, $49^{\mathbf{3}}$, $56^{\mathbf{1}}$, $63^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $7^{\mathbf{2}}$, $49^{\mathbf{6}}$, $56^{\mathbf{1}}$, $63^{\mathbf{2}}$, $\frac{196}{3}^{\mathbf{87}}$, $\infty^{\mathbf{21}}$
117		$\frac{105}{2}^{\mathbf{2}}$, $\frac{133}{2}^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $14^{\mathbf{3}}$, $\frac{105}{2}^{\mathbf{2}}$, $56^{\mathbf{1}}$, $\frac{133}{2}^{\mathbf{2}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $14^{\mathbf{3}}$, $\frac{105}{2}^{\mathbf{4}}$, $56^{\mathbf{1}}$, $\frac{133}{2}^{\mathbf{4}}$, $70^{\mathbf{97}}$, $\infty^{\mathbf{26}}$
124		$56^{\mathbf{1}}$, $70^{\mathbf{3}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{1}}$, $21^{\mathbf{4}}$, $56^{\mathbf{2}}$, $70^{\mathbf{3}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $21^{\mathbf{4}}$, $56^{\mathbf{3}}$, $70^{\mathbf{6}}$, $\frac{224}{3}^{\mathbf{108}}$, $\infty^{\mathbf{31}}$
131		$\frac{147}{2}^{\mathbf{4}}$, $\infty^{\mathbf{13}}$	$\frac{14}{3}^{\mathbf{3}}$, $28^{\mathbf{3}}$, $56^{\mathbf{1}}$, $\frac{147}{2}^{\mathbf{4}}$, $\infty^{\mathbf{6}}$	$\frac{14}{3}^{\mathbf{3}}$, $28^{\mathbf{3}}$, $56^{\mathbf{1}}$, $\frac{147}{2}^{\mathbf{8}}$, $\frac{238}{3}^{\mathbf{120}}$, $\infty^{\mathbf{36}}$
138		$63^{\mathbf{2}}$, $77^{\mathbf{3}}$, $\infty^{\mathbf{14}}$	$\frac{28}{3}^{\mathbf{3}}$, $28^{\mathbf{2}}$, $35^{\mathbf{2}}$, $56^{\mathbf{1}}$, $63^{\mathbf{2}}$, $77^{\mathbf{3}}$, $\infty^{\mathbf{6}}$	$\frac{28}{3}^{\mathbf{3}}$, $28^{\mathbf{2}}$, $35^{\mathbf{2}}$, $56^{\mathbf{1}}$, $63^{\mathbf{4}}$, $77^{\mathbf{6}}$, $84^{\mathbf{133}}$, $\infty^{\mathbf{39}}$
145		$\frac{133}{2}^{\mathbf{4}}$, $\frac{161}{2}^{\mathbf{2}}$, $\infty^{\mathbf{15}}$	$14^{\mathbf{1}}$, $\frac{56}{3}^{\mathbf{3}}$, $28^{\mathbf{2}}$, $42^{\mathbf{1}}$, $56^{\mathbf{1}}$, $\frac{133}{2}^{\mathbf{4}}$, $\frac{161}{2}^{\mathbf{2}}$, $\infty^{\mathbf{7}}$	$14^{\mathbf{1}}$, $\frac{56}{3}^{\mathbf{3}}$, $28^{\mathbf{2}}$, $42^{\mathbf{1}}$, $56^{\mathbf{1}}$, $\frac{133}{2}^{\mathbf{8}}$, $\frac{161}{2}^{\mathbf{4}}$, $\frac{266}{3}^{\mathbf{147}}$, $\infty^{\mathbf{43}}$
152		$70^{\mathbf{6}}$, $84^{\mathbf{1}}$, $\infty^{\mathbf{16}}$	$21^{\mathbf{2}}$, $28^{\mathbf{5}}$, $56^{\mathbf{1}}$, $70^{\mathbf{6}}$, $84^{\mathbf{1}}$, $\infty^{\mathbf{8}}$	$21^{\mathbf{2}}$, $28^{\mathbf{5}}$, $56^{\mathbf{1}}$, $70^{\mathbf{12}}$, $84^{\mathbf{2}}$, $\frac{280}{3}^{\mathbf{162}}$, $\infty^{\mathbf{47}}$
159		$\frac{147}{2}^{\mathbf{8}}$, $\infty^{\mathbf{17}}$	$0^{\mathbf{1}}$, $28^{\mathbf{3}}$, $\frac{63}{2}^{\mathbf{4}}$, $\frac{147}{2}^{\mathbf{8}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $28^{\mathbf{3}}$, $\frac{63}{2}^{\mathbf{4}}$, $\frac{147}{2}^{\mathbf{16}}$, $98^{\mathbf{178}}$, $\infty^{\mathbf{51}}$

166		$77^6, 84^4, \infty^{17}$	$0^1, 35^4, 56^1, 63^2, 77^6, 84^4, \infty^9$	$0^1, 35^4, 56^1, 63^2, 77^{12}, 84^8, \frac{308}{3}^{195}, \infty^{53}$
173		$\frac{161}{2}^4, \frac{175}{2}^4, \frac{189}{2}^2, \infty^{20}$	$0^1, 14^2, 42^3, 56^1, 70^4, \frac{161}{2}^4, \frac{175}{2}^4, \frac{189}{2}^2, \infty^9$	$0^1, 14^2, 42^3, 56^1, 70^4, \frac{161}{2}^8, \frac{175}{2}^8, \frac{189}{2}^4, \frac{322}{3}^{210}, \infty^{59}$

Table 39: Slopes for $q = 8$, $i = 1$, type 6. Suspected newform slopes are marked in blue.

k	T_1-Slopes	$U_1^{P_0}$-Slopes	$U_1^{P_2}$-Slopes	$U_1^{\Gamma_0(t)}$-Slopes
1				
8				
15				$0^{\mathbf{1}}$
22				$\frac{14}{3}^{\mathbf{3}}$
29				$\frac{28}{3}^{\mathbf{6}}$
36				$14^{\mathbf{10}}$
43				$\frac{56}{3}^{\mathbf{15}}$
50				$\frac{70}{3}^{\mathbf{21}}$
57		$\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{1}}$, $28^{\mathbf{25}}$, $\infty^{\mathbf{2}}$
64		$\infty^{\mathbf{2}}$	$7^{\mathbf{2}}$	$7^{\mathbf{2}}$, $\frac{98}{3}^{\mathbf{30}}$, $\infty^{\mathbf{4}}$
71		$\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $\frac{112}{3}^{\mathbf{36}}$, $\infty^{\mathbf{7}}$
78		$\infty^{\mathbf{4}}$	$7^{\mathbf{2}}$, $\infty^{\mathbf{2}}$	$7^{\mathbf{2}}$, $42^{\mathbf{43}}$, $\infty^{\mathbf{10}}$
85		$\infty^{\mathbf{5}}$	$14^{\mathbf{1}}$, $28^{\mathbf{2}}$, $\infty^{\mathbf{2}}$	$14^{\mathbf{1}}$, $28^{\mathbf{2}}$, $\frac{140}{3}^{\mathbf{51}}$, $\infty^{\mathbf{12}}$
92		$\infty^{\mathbf{6}}$	$35^{\mathbf{4}}$, $\infty^{\mathbf{2}}$	$35^{\mathbf{4}}$, $\frac{154}{3}^{\mathbf{60}}$, $\infty^{\mathbf{14}}$
99		$42^{\mathbf{1}}$, $\infty^{\mathbf{6}}$	$28^{\mathbf{2}}$, $42^{\mathbf{3}}$, $\infty^{\mathbf{2}}$	$28^{\mathbf{2}}$, $42^{\mathbf{4}}$, $56^{\mathbf{70}}$, $\infty^{\mathbf{15}}$
106		$49^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$35^{\mathbf{4}}$, $49^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$35^{\mathbf{4}}$, $49^{\mathbf{2}}$, $\frac{182}{3}^{\mathbf{81}}$, $\infty^{\mathbf{18}}$
113		$49^{\mathbf{2}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{1}}$, $42^{\mathbf{2}}$, $49^{\mathbf{2}}$, $56^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $42^{\mathbf{2}}$, $49^{\mathbf{4}}$, $56^{\mathbf{1}}$, $\frac{196}{3}^{\mathbf{93}}$, $\infty^{\mathbf{19}}$
120		$56^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$\frac{14}{3}^{\mathbf{3}}$, $56^{\mathbf{2}}$, $63^{\mathbf{2}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$\frac{14}{3}^{\mathbf{3}}$, $56^{\mathbf{4}}$, $63^{\mathbf{2}}$, $70^{\mathbf{103}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{23}}$
127		$56^{\mathbf{1}}$, $70^{\mathbf{1}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $56^{\mathbf{2}}$, $70^{\mathbf{2}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $56^{\mathbf{3}}$, $70^{\mathbf{3}}$, $\frac{224}{3}^{\mathbf{114}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{28}}$
134		$63^{\mathbf{1}}$, $77^{\mathbf{1}}$, $\infty^{\mathbf{13}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $63^{\mathbf{3}}$, $77^{\mathbf{1}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{6}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $63^{\mathbf{4}}$, $77^{\mathbf{2}}$, $\frac{238}{3}^{\mathbf{126}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{34}}$
141		$77^{\mathbf{2}}$, $\infty^{\mathbf{15}}$	$\frac{28}{3}^{\mathbf{3}}$, $28^{\mathbf{2}}$, $70^{\mathbf{1}}$, $77^{\mathbf{2}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{8}}$	$\frac{28}{3}^{\mathbf{3}}$, $28^{\mathbf{2}}$, $70^{\mathbf{1}}$, $77^{\mathbf{4}}$, $84^{\mathbf{139}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{40}}$
148		$84^{\mathbf{2}}$, $\infty^{\mathbf{17}}$	$14^{\mathbf{1}}$, $\frac{98}{3}^{\mathbf{6}}$, $84^{\mathbf{2}}$, $154^{\mathbf{2}}$, $\infty^{\mathbf{8}}$	$14^{\mathbf{1}}$, $\frac{98}{3}^{\mathbf{6}}$, $84^{\mathbf{4}}$, $\frac{266}{3}^{\mathbf{153}}$, $154^{\mathbf{2}}$, $\infty^{\mathbf{44}}$
155		$70^{\mathbf{2}}$, $84^{\mathbf{1}}$, $\infty^{\mathbf{18}}$	$28^{\mathbf{2}}$, $\frac{112}{3}^{\mathbf{6}}$, $70^{\mathbf{2}}$, $84^{\mathbf{1}}$, $154^{\mathbf{2}}$, $\infty^{\mathbf{8}}$	$28^{\mathbf{2}}$, $\frac{112}{3}^{\mathbf{6}}$, $70^{\mathbf{4}}$, $84^{\mathbf{2}}$, $\frac{280}{3}^{\mathbf{168}}$, $154^{\mathbf{2}}$, $\infty^{\mathbf{47}}$

162		$\frac{301}{4}^{\mathbf{4}}$, $91^{\mathbf{1}}$, $\infty^{\mathbf{18}}$	$\frac{98}{3}^{\mathbf{6}}$, $42^{\mathbf{2}}$, $\frac{301}{4}^{\mathbf{4}}$, $91^{\mathbf{1}}$, $154^{\mathbf{2}}$, $\infty^{\mathbf{8}}$	$\frac{98}{3}^{\mathbf{6}}$, $42^{\mathbf{2}}$, $\frac{301}{4}^{\mathbf{8}}$, $91^{\mathbf{2}}$, $98^{\mathbf{184}}$, $154^{\mathbf{2}}$, $\infty^{\mathbf{49}}$
169		$77^{\mathbf{4}}$, $\frac{161}{2}^{\mathbf{2}}$, $\infty^{\mathbf{19}}$	$0^{\mathbf{1}}$, $\frac{112}{3}^{\mathbf{6}}$, $56^{\mathbf{1}}$, $77^{\mathbf{4}}$, $\frac{161}{2}^{\mathbf{2}}$, $154^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $\frac{112}{3}^{\mathbf{6}}$, $56^{\mathbf{1}}$, $77^{\mathbf{8}}$, $\frac{161}{2}^{\mathbf{4}}$, $\frac{308}{3}^{\mathbf{201}}$, $154^{\mathbf{2}}$, $\infty^{\mathbf{53}}$
176		$\frac{329}{4}^{\mathbf{8}}$, $\infty^{\mathbf{19}}$	$7^{\mathbf{2}}$, $42^{\mathbf{2}}$, $\frac{182}{3}^{\mathbf{3}}$, $63^{\mathbf{2}}$, $\frac{329}{4}^{\mathbf{8}}$, $182^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$7^{\mathbf{2}}$, $42^{\mathbf{2}}$, $\frac{182}{3}^{\mathbf{3}}$, $63^{\mathbf{2}}$, $\frac{329}{4}^{\mathbf{16}}$, $\frac{322}{3}^{\mathbf{219}}$, $182^{\mathbf{1}}$, $\infty^{\mathbf{55}}$

6.2 $i = 2$.

Table 40: Slopes for $q = 8$, $i = 2$, type 0. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
4				
11				
18				0^1
25				$\frac{7}{3}^{3}$
32				$\frac{14}{3}^{6}$
39				7^{10}
46				$\frac{28}{3}^{15}$
53				$\frac{35}{3}^{21}$
60				14^{28}
67		0^1	0^1	$0^2, \frac{49}{3}^{33}, \infty^1$
74		$0^1, \infty^1$	$0^1, \infty^1$	$0^2, \frac{56}{3}^{39}, \infty^4$
81		$7^2, \infty^1$	$7^2, \infty^1$	$7^4, 21^{46}, \infty^5$
88		$7^2, \infty^2$	$7^2, \infty^2$	$7^4, \frac{70}{3}^{54}, \infty^8$
95		$14^3, \infty^2$	$14^3, \infty^2$	$14^6, \frac{77}{3}^{63}, \infty^9$
102		$14^3, \infty^3$	$14^3, \infty^3$	$14^6, 28^{73}, \infty^{12}$
109		$21^4, \infty^3$	$21^4, \infty^3$	$21^8, \frac{91}{3}^{84}, \infty^{13}$
116		$0^1, 21^4, \infty^3$	$21^4, \infty^4$	$0^1, 21^8, \frac{98}{3}^{96}, \infty^{15}$
123		$0^3, 28^3, \infty^3$	$0^1, 28^3, \infty^5$	$0^4, 28^6, 35^{109}, \infty^{17}$
130		$0^2, \frac{7}{2}^2, 14^1, 28^3, \infty^3$	$0^1, \frac{7}{2}^2, 28^3, \infty^5$	$0^3, \frac{7}{2}^4, 14^1, 28^6, \frac{112}{3}^{120}, \infty^{19}$
137		$\frac{7}{3}^3, 7^1, 14^3, 35^2, \infty^4$	$\frac{7}{3}^3, 7^1, 14^1, 35^2, \infty^6$	$\frac{7}{3}^6, 7^2, 14^4, 35^4, \frac{119}{3}^{132}, \infty^{23}$
144		$\frac{14}{3}^3, 7^2, 14^2, 28^1, 35^2, \infty^5$	$\frac{14}{3}^3, 7^2, 14^1, 35^2, \infty^7$	$\frac{14}{3}^6, 7^4, 14^3, 28^1, 35^4, 42^{145}, \infty^{27}$
151		$7^1, \frac{35}{4}^4, 14^2, 28^2, 42^1, \infty^7$	$7^1, \frac{35}{4}^4, 14^2, 42^1, \infty^9$	$7^2, \frac{35}{4}^8, 14^4, 28^2, 42^2, \frac{133}{3}^{159}, \infty^{33}$
158		$\frac{21}{2}^2, 14^3, \frac{35}{2}^4, 28^1, 42^2, \infty^7$	$\frac{21}{2}^2, 14^3, \frac{35}{2}^4, 42^1, \infty^9$	$\frac{21}{2}^4, 14^6, \frac{35}{2}^8, 28^1, 42^3, \frac{140}{3}^{174}, \infty^{35}$

165		$14^{\mathbf{1}}$, $\frac{49}{3}^{\mathbf{6}}$, $21^{\mathbf{2}}$, $28^{\mathbf{2}}$, $42^{\mathbf{2}}$, $\infty^{\mathbf{8}}$	$14^{\mathbf{1}}$, $\frac{49}{3}^{\mathbf{6}}$, $21^{\mathbf{2}}$, $28^{\mathbf{2}}$, $\infty^{\mathbf{10}}$	$14^{\mathbf{2}}$, $\frac{49}{3}^{\mathbf{12}}$, $21^{\mathbf{4}}$, $28^{\mathbf{4}}$, $42^{\mathbf{2}}$, $49^{\mathbf{190}}$, $\infty^{\mathbf{39}}$
172		$0^{\mathbf{2}}$, $\frac{56}{3}^{\mathbf{6}}$, $21^{\mathbf{4}}$, $28^{\mathbf{2}}$, $42^{\mathbf{1}}$, $\infty^{\mathbf{8}}$	$\frac{56}{3}^{\mathbf{6}}$, $21^{\mathbf{4}}$, $28^{\mathbf{2}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{2}}$, $\frac{56}{3}^{\mathbf{12}}$, $21^{\mathbf{8}}$, $28^{\mathbf{4}}$, $42^{\mathbf{1}}$, $\frac{154}{3}^{\mathbf{207}}$, $\infty^{\mathbf{42}}$

Table 41: Slopes for $q = 8$, $i = 2$, type 1. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
0				0^1
7		0^1	0^1	$0^2, \infty^1$
14		0^2	$0^1, \infty^1$	$0^3, \infty^3$
21		0^3	$0^1, \infty^2$	$0^4, 7^1, \infty^5$
28		0^4	$0^1, \infty^3$	$0^5, \frac{28}{3}^3, \infty^7$
35		0^5	$0^1, \infty^4$	$0^6, \frac{35}{3}^6, \infty^9$
42		0^6	$0^1, \infty^5$	$0^7, 14^{10}, \infty^{11}$
49		0^7	$0^1, \infty^6$	$0^8, \frac{49}{3}^{15}, \infty^{13}$
56		0^8	$0^1, \infty^7$	$0^9, \frac{56}{3}^{21}, \infty^{15}$
63		0^9	$0^1, \infty^8$	$0^{10}, 21^{28}, \infty^{17}$
70	0^1	$0^{10}, \infty^1$	$0^2, \infty^9$	$0^{11}, \frac{70}{3}^{36}, \infty^{19}$
77	0^1	$0^{11}, 7^1, \infty^1$	$0^2, 7^1, \infty^{10}$	$0^{12}, 7^2, \frac{77}{3}^{42}, \infty^{22}$
84	0^1	$0^{12}, \frac{21}{2}^2, \infty^1$	$0^2, \frac{21}{2}^2, \infty^{11}$	$0^{13}, \frac{21}{2}^4, 28^{49}, \infty^{25}$
91	0^1	$0^{13}, 14^3, \infty^1$	$0^2, 14^3, \infty^{12}$	$0^{14}, 14^6, \frac{91}{3}^{57}, \infty^{28}$
98	0^1	$0^{14}, \frac{35}{2}^4, \infty^1$	$0^2, \frac{35}{2}^4, \infty^{13}$	$0^{15}, \frac{35}{2}^8, \frac{98}{3}^{66}, \infty^{31}$
105	0^1	$0^{15}, 21^5, \infty^1$	$0^2, 21^5, \infty^{14}$	$0^{16}, 21^{10}, 35^{76}, \infty^{34}$
112	0^1	$0^{16}, \frac{49}{2}^6, \infty^1$	$0^2, \frac{49}{2}^6, \infty^{15}$	$0^{17}, \frac{49}{2}^{12}, \frac{112}{3}^{87}, \infty^{37}$
119	0^1	$0^{17}, 28^7, \infty^1$	$0^2, 28^7, \infty^{16}$	$0^{18}, 28^{14}, \frac{119}{3}^{99}, \infty^{40}$
126	0^1	$0^{18}, \frac{63}{2}^8, \infty^1$	$0^2, \frac{63}{2}^8, \infty^{17}$	$0^{19}, \frac{63}{2}^{16}, 42^{112}, \infty^{43}$
133	0^2	$0^{19}, 7^2, 35^7, \infty^2$	$0^3, 7^1, 35^7, \infty^{19}$	$0^{20}, \ 7^3, \ 35^{14}, \ \frac{133}{3}^{126},$ ∞^{47}
140	0^2	$0^{20}, \ \frac{28}{3}^3, \ 14^1, \ \frac{77}{2}^6,$ $70^1, \infty^2$	$0^3, \frac{28}{3}^3, \frac{77}{2}^6, 70^1, \infty^{20}$	$0^{21}, \ \frac{28}{3}^6, \ 14^1, \ \frac{77}{2}^{12},$ $\frac{140}{3}^{138}, 70^2, \infty^{51}$
147	0^2	$0^{21}, \ \frac{35}{3}^3, \ 14^2, \ 21^1,$ $42^5, 70^1, \infty^3$	$0^3, \frac{35}{3}^3, 14^2, 42^5, 70^1,$ ∞^{22}	$0^{22}, \frac{35}{3}^6, 14^4, 21^1, 42^{10},$ $49^{151}, 70^2, \infty^{57}$
154	0^2	$0^{22}, \ 14^1, \ \frac{49}{3}^6, \ 28^1,$ $\frac{91}{2}^4, 77^2, \infty^3$	$0^3, 14^1, \frac{49}{3}^6, \frac{91}{2}^4, 77^2,$ ∞^{23}	$0^{23}, 14^2, \frac{49}{3}^{12}, 28^1, \frac{91}{2}^8,$ $\frac{154}{3}^{165}, 77^4, \infty^{61}$
161	0^2	$0^{23}, \ \frac{56}{3}^6, \ 21^3, \ 35^1,$ $49^3, 77^2, \infty^4$	$0^3, \frac{56}{3}^6, 21^3, 49^3, 77^2,$ ∞^{25}	$0^{24}, \frac{56}{3}^{12}, 21^6, 35^1, 49^6,$ $\frac{161}{3}^{180}, 77^4, \infty^{67}$

168	0^2	0^{24}, 21^2, $\frac{70}{3}^9$, 42^1, $\frac{105}{2}^2$, 84^3, ∞^4	0^3, 21^2, $\frac{70}{3}^9$, $\frac{105}{2}^2$, 84^3, ∞^{26}	0^{25}, 21^4, $\frac{70}{3}^{18}$, 42^1, $\frac{105}{2}^4$, 56^{196}, 84^6, ∞^{71}
175	0^2	0^{25}, $\frac{77}{3}^9$, 28^4, 49^1, 56^1, 84^3, ∞^5	0^3, $\frac{77}{3}^9$, 28^4, 56^1, 84^3, ∞^{28}	0^{26}, $\frac{77}{3}^{18}$, 28^8, 49^1, 56^2, $\frac{175}{3}^{213}$, 84^6, ∞^{77}

Table 42: Slopes for $q = 8$, $i = 2$, type 2. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
3				$0^{\mathbf{1}}$
10				$\frac{7}{3}^{\mathbf{3}}$
17		$0^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{2}}, \frac{14}{3}^{\mathbf{3}}, \infty^{\mathbf{1}}$
24		$\frac{7}{2}^{\mathbf{2}}$	$\frac{7}{2}^{\mathbf{2}}$	$\frac{7}{2}^{\mathbf{4}}, 7^{\mathbf{4}}, \infty^{\mathbf{2}}$
31		$0^{\mathbf{2}}, 7^{\mathbf{1}}$	$0^{\mathbf{1}}, 7^{\mathbf{1}}, \infty^{\mathbf{1}}$	$0^{\mathbf{3}}, 7^{\mathbf{2}}, \frac{28}{3}^{\mathbf{6}}, \infty^{\mathbf{4}}$
38		$\frac{7}{2}^{\mathbf{2}}, 7^{\mathbf{1}}, \infty^{\mathbf{1}}$	$\frac{7}{2}^{\mathbf{2}}, \infty^{\mathbf{2}}$	$\frac{7}{2}^{\mathbf{4}}, 7^{\mathbf{1}}, \frac{35}{3}^{\mathbf{9}}, \infty^{\mathbf{7}}$
45		$0^{\mathbf{3}}, 7^{\mathbf{1}}, \infty^{\mathbf{1}}$	$0^{\mathbf{1}}, 7^{\mathbf{1}}, \infty^{\mathbf{3}}$	$0^{\mathbf{4}}, 7^{\mathbf{2}}, 14^{\mathbf{13}}, \infty^{\mathbf{9}}$
52		$\frac{7}{2}^{\mathbf{2}}, 7^{\mathbf{2}}, \infty^{\mathbf{2}}$	$\frac{7}{2}^{\mathbf{2}}, \infty^{\mathbf{4}}$	$\frac{7}{2}^{\mathbf{4}}, 7^{\mathbf{2}}, \frac{49}{3}^{\mathbf{18}}, \infty^{\mathbf{12}}$
59		$0^{\mathbf{4}}, 7^{\mathbf{1}}, \infty^{\mathbf{2}}$	$0^{\mathbf{1}}, 7^{\mathbf{1}}, \infty^{\mathbf{5}}$	$0^{\mathbf{5}}, 7^{\mathbf{2}}, \frac{56}{3}^{\mathbf{24}}, \infty^{\mathbf{14}}$
66		$\frac{7}{2}^{\mathbf{2}}, 7^{\mathbf{3}}, \infty^{\mathbf{3}}$	$\frac{7}{2}^{\mathbf{2}}, \infty^{\mathbf{6}}$	$\frac{7}{2}^{\mathbf{4}}, 7^{\mathbf{3}}, 21^{\mathbf{31}}, \infty^{\mathbf{17}}$
73		$0^{\mathbf{5}}, 7^{\mathbf{1}}, \infty^{\mathbf{3}}$	$0^{\mathbf{1}}, 7^{\mathbf{1}}, \infty^{\mathbf{7}}$	$0^{\mathbf{6}}, 7^{\mathbf{2}}, \frac{70}{3}^{\mathbf{39}}, \infty^{\mathbf{19}}$
80		$\frac{7}{3}^{\mathbf{3}}, 7^{\mathbf{4}}, 63^{\mathbf{1}}, \infty^{\mathbf{3}}$	$\frac{7}{3}^{\mathbf{3}}, 63^{\mathbf{1}}, \infty^{\mathbf{7}}$	$\frac{7}{3}^{\mathbf{6}}, 7^{\mathbf{4}}, \frac{77}{3}^{\mathbf{45}}, 63^{\mathbf{2}}, \infty^{\mathbf{21}}$
87		$0^{\mathbf{6}}, \frac{14}{3}^{\mathbf{3}}, 63^{\mathbf{1}}, \infty^{\mathbf{3}}$	$0^{\mathbf{1}}, \frac{14}{3}^{\mathbf{3}}, 63^{\mathbf{1}}, \infty^{\mathbf{8}}$	$0^{\mathbf{7}}, \frac{14}{3}^{\mathbf{6}}, 28^{\mathbf{52}}, 63^{\mathbf{2}}, \infty^{\mathbf{24}}$
94		$\frac{7}{3}^{\mathbf{3}}, \frac{7}{2}^{\mathbf{4}}, 7^{\mathbf{4}}, 63^{\mathbf{1}}, \infty^{\mathbf{3}}$	$\frac{7}{3}^{\mathbf{3}}, 7^{\mathbf{1}}, 63^{\mathbf{1}}, \infty^{\mathbf{10}}$	$\frac{7}{3}^{\mathbf{6}}, \frac{7}{2}^{\mathbf{4}}, 7^{\mathbf{5}}, \frac{91}{3}^{\mathbf{60}}, 63^{\mathbf{2}}, \infty^{\mathbf{28}}$
101		$0^{\mathbf{7}}, \frac{14}{3}^{\mathbf{3}}, 7^{\mathbf{2}}, 63^{\mathbf{1}}, \infty^{\mathbf{4}}$	$0^{\mathbf{1}}, \frac{14}{3}^{\mathbf{3}}, 63^{\mathbf{1}}, \infty^{\mathbf{12}}$	$0^{\mathbf{8}}, \frac{14}{3}^{\mathbf{6}}, 7^{\mathbf{2}}, \frac{98}{3}^{\mathbf{69}}, 63^{\mathbf{2}}, \infty^{\mathbf{33}}$
108		$\frac{7}{3}^{\mathbf{3}}, \frac{7}{2}^{\mathbf{8}}, 7^{\mathbf{3}}, 63^{\mathbf{1}}, \infty^{\mathbf{4}}$	$\frac{7}{3}^{\mathbf{3}}, 7^{\mathbf{1}}, 63^{\mathbf{1}}, \infty^{\mathbf{14}}$	$\frac{7}{3}^{\mathbf{6}}, \frac{7}{2}^{\mathbf{8}}, 7^{\mathbf{4}}, 35^{\mathbf{79}}, 63^{\mathbf{2}}, \infty^{\mathbf{37}}$
115		$0^{\mathbf{8}}, \frac{14}{3}^{\mathbf{3}}, 7^{\mathbf{4}}, 63^{\mathbf{1}}, \infty^{\mathbf{5}}$	$0^{\mathbf{1}}, \frac{14}{3}^{\mathbf{3}}, 63^{\mathbf{1}}, \infty^{\mathbf{16}}$	$0^{\mathbf{9}}, \frac{14}{3}^{\mathbf{6}}, 7^{\mathbf{4}}, \frac{112}{3}^{\mathbf{90}}, 63^{\mathbf{2}}, \infty^{\mathbf{42}}$
122		$\frac{7}{3}^{\mathbf{3}}, \frac{7}{2}^{\mathbf{12}}, 7^{\mathbf{2}}, 63^{\mathbf{1}}, \infty^{\mathbf{5}}$	$\frac{7}{3}^{\mathbf{3}}, 7^{\mathbf{1}}, 63^{\mathbf{1}}, \infty^{\mathbf{18}}$	$\frac{7}{3}^{\mathbf{6}}, \frac{7}{2}^{\mathbf{12}}, 7^{\mathbf{3}}, \frac{119}{3}^{\mathbf{102}}, 63^{\mathbf{2}}, \infty^{\mathbf{46}}$
129		$0^{\mathbf{9}}, \frac{14}{3}^{\mathbf{3}}, 7^{\mathbf{6}}, 63^{\mathbf{1}}, \infty^{\mathbf{6}}$	$0^{\mathbf{1}}, \frac{14}{3}^{\mathbf{3}}, 63^{\mathbf{1}}, \infty^{\mathbf{20}}$	$0^{\mathbf{10}}, \frac{14}{3}^{\mathbf{6}}, 7^{\mathbf{6}}, 42^{\mathbf{115}}, 63^{\mathbf{2}}, \infty^{\mathbf{51}}$
136		$\frac{7}{2}^{\mathbf{18}}, 7^{\mathbf{1}}, \frac{63}{2}^{\mathbf{2}}, \infty^{\mathbf{6}}$	$\frac{7}{2}^{\mathbf{2}}, 7^{\mathbf{1}}, \frac{63}{2}^{\mathbf{2}}, \infty^{\mathbf{22}}$	$\frac{7}{2}^{\mathbf{20}}, 7^{\mathbf{2}}, \frac{63}{2}^{\mathbf{4}}, \frac{133}{3}^{\mathbf{129}}, \infty^{\mathbf{55}}$
143	$0^{\mathbf{1}}$	$0^{\mathbf{10}}, 7^{\mathbf{9}}, \frac{133}{4}^{\mathbf{4}}, \infty^{\mathbf{7}}$	$0^{\mathbf{2}}, 7^{\mathbf{1}}, \frac{133}{4}^{\mathbf{4}}, \infty^{\mathbf{23}}$	$0^{\mathbf{11}}, 7^{\mathbf{10}}, \frac{133}{4}^{\mathbf{8}}, \frac{140}{3}^{\mathbf{144}}, \infty^{\mathbf{58}}$
150	$7^{\mathbf{1}}$	$\frac{7}{3}^{\mathbf{3}}, \frac{7}{2}^{\mathbf{14}}, 7^{\mathbf{2}}, \frac{21}{2}^{\mathbf{2}}, \frac{63}{2}^{\mathbf{2}}, 35^{\mathbf{2}}, 119^{\mathbf{1}}, \infty^{\mathbf{7}}$	$\frac{7}{2}^{\mathbf{2}}, 7^{\mathbf{1}}, \frac{21}{2}^{\mathbf{2}}, \frac{63}{2}^{\mathbf{2}}, 35^{\mathbf{2}}, \infty^{\mathbf{24}}$	$\frac{7}{3}^{\mathbf{3}}, \frac{7}{2}^{\mathbf{16}}, 7^{\mathbf{2}}, \frac{21}{2}^{\mathbf{4}}, \frac{63}{2}^{\mathbf{4}}, 35^{\mathbf{4}}, 49^{\mathbf{157}}, 119^{\mathbf{1}}, \infty^{\mathbf{62}}$
157	$0^{\mathbf{1}}$	$0^{\mathbf{11}}, \frac{14}{3}^{\mathbf{3}}, 7^{\mathbf{7}}, 14^{\mathbf{3}}, \frac{133}{4}^{\mathbf{4}}, 126^{\mathbf{1}}, \infty^{\mathbf{7}}$	$0^{\mathbf{2}}, 7^{\mathbf{1}}, 14^{\mathbf{3}}, \frac{133}{4}^{\mathbf{4}}, \infty^{\mathbf{26}}$	$0^{\mathbf{12}}, \frac{14}{3}^{\mathbf{3}}, 7^{\mathbf{8}}, 14^{\mathbf{6}}, \frac{133}{4}^{\mathbf{8}}, \frac{154}{3}^{\mathbf{171}}, 126^{\mathbf{1}}, \infty^{\mathbf{67}}$

164	$7^{\mathbf{1}}$	$\frac{7}{3}^{\mathbf{6}}$, $\frac{7}{2}^{\mathbf{10}}$, $7^{\mathbf{5}}$, $\frac{35}{2}^{\mathbf{4}}$, $\frac{63}{2}^{\mathbf{2}}$, $35^{\mathbf{2}}$, $119^{\mathbf{2}}$, $\infty^{\mathbf{8}}$	$\frac{7}{2}^{\mathbf{2}}$, $7^{\mathbf{1}}$, $\frac{35}{2}^{\mathbf{4}}$, $\frac{63}{2}^{\mathbf{2}}$, $35^{\mathbf{2}}$, $\infty^{\mathbf{28}}$	$\frac{7}{3}^{\mathbf{6}}$, $\frac{7}{2}^{\mathbf{12}}$, $7^{\mathbf{5}}$, $\frac{35}{2}^{\mathbf{8}}$, $\frac{63}{2}^{\mathbf{4}}$, $35^{\mathbf{4}}$, $\frac{161}{3}^{\mathbf{186}}$, $119^{\mathbf{2}}$, $\infty^{\mathbf{73}}$
171	$0^{\mathbf{1}}$	$0^{\mathbf{12}}$, $\frac{14}{3}^{\mathbf{6}}$, $7^{\mathbf{5}}$, $21^{\mathbf{5}}$, $\frac{133}{4}^{\mathbf{4}}$, $126^{\mathbf{2}}$, $\infty^{\mathbf{8}}$	$0^{\mathbf{2}}$, $7^{\mathbf{1}}$, $21^{\mathbf{5}}$, $\frac{133}{4}^{\mathbf{4}}$, $\infty^{\mathbf{30}}$	$0^{\mathbf{13}}$, $\frac{14}{3}^{\mathbf{6}}$, $7^{\mathbf{6}}$, $21^{\mathbf{10}}$, $\frac{133}{4}^{\mathbf{8}}$, $56^{\mathbf{202}}$, $126^{\mathbf{2}}$, $\infty^{\mathbf{78}}$

Table 43: Slopes for $q = 8$, $i = 2$, type 3. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
6				$0^{\mathbf{1}}$
13				$\frac{7}{3}^{\mathbf{3}}$
20				$\frac{14}{3}^{\mathbf{6}}$
27		$0^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{2}}$, $7^{\mathbf{7}}$, $\infty^{\mathbf{1}}$
34		$0^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{2}}$, $\frac{28}{3}^{\mathbf{9}}$, $\infty^{\mathbf{4}}$
41		$7^{\mathbf{2}}$, $\infty^{\mathbf{1}}$	$7^{\mathbf{2}}$, $\infty^{\mathbf{1}}$	$7^{\mathbf{4}}$, $\frac{35}{3}^{\mathbf{12}}$, $\infty^{\mathbf{5}}$
48		$0^{\mathbf{1}}$, $7^{\mathbf{2}}$, $\infty^{\mathbf{1}}$	$7^{\mathbf{2}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $7^{\mathbf{4}}$, $14^{\mathbf{16}}$, $\infty^{\mathbf{7}}$
55		$0^{\mathbf{3}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{4}}$, $14^{\mathbf{2}}$, $\frac{49}{3}^{\mathbf{21}}$, $\infty^{\mathbf{9}}$
62		$0^{\mathbf{2}}$, $14^{\mathbf{2}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{3}}$, $14^{\mathbf{3}}$, $\frac{56}{3}^{\mathbf{27}}$, $\infty^{\mathbf{12}}$
69		$7^{\mathbf{2}}$, $14^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$7^{\mathbf{2}}$, $\infty^{\mathbf{5}}$	$7^{\mathbf{4}}$, $14^{\mathbf{2}}$, $21^{\mathbf{34}}$, $\infty^{\mathbf{15}}$
76		$0^{\mathbf{2}}$, $7^{\mathbf{2}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$7^{\mathbf{2}}$, $\infty^{\mathbf{6}}$	$0^{\mathbf{2}}$, $7^{\mathbf{4}}$, $14^{\mathbf{1}}$, $\frac{70}{3}^{\mathbf{42}}$, $\infty^{\mathbf{17}}$
83		$0^{\mathbf{5}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{6}}$, $14^{\mathbf{2}}$, $\frac{77}{3}^{\mathbf{51}}$, $\infty^{\mathbf{19}}$
90		$0^{\mathbf{3}}$, $\frac{7}{2}^{\mathbf{2}}$, $14^{\mathbf{3}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $\frac{7}{2}^{\mathbf{2}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{4}}$, $\frac{7}{2}^{\mathbf{4}}$, $14^{\mathbf{4}}$, $28^{\mathbf{58}}$, $\infty^{\mathbf{21}}$
97		$\frac{7}{3}^{\mathbf{3}}$, $7^{\mathbf{1}}$, $14^{\mathbf{5}}$, $\infty^{\mathbf{4}}$	$\frac{7}{3}^{\mathbf{3}}$, $7^{\mathbf{1}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{8}}$	$\frac{7}{3}^{\mathbf{6}}$, $7^{\mathbf{2}}$, $14^{\mathbf{6}}$, $\frac{91}{3}^{\mathbf{66}}$, $\infty^{\mathbf{25}}$
104		$0^{\mathbf{3}}$, $\frac{14}{3}^{\mathbf{3}}$, $7^{\mathbf{2}}$, $14^{\mathbf{3}}$, $\infty^{\mathbf{4}}$	$\frac{14}{3}^{\mathbf{3}}$, $7^{\mathbf{2}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{3}}$, $\frac{14}{3}^{\mathbf{6}}$, $7^{\mathbf{4}}$, $14^{\mathbf{4}}$, $\frac{98}{3}^{\mathbf{75}}$, $\infty^{\mathbf{28}}$
111		$0^{\mathbf{7}}$, $7^{\mathbf{1}}$, $\frac{35}{4}^{\mathbf{4}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $7^{\mathbf{1}}$, $\frac{35}{4}^{\mathbf{4}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{8}}$, $7^{\mathbf{2}}$, $\frac{35}{4}^{\mathbf{8}}$, $35^{\mathbf{85}}$, $\infty^{\mathbf{33}}$
118		$0^{\mathbf{4}}$, $\frac{7}{2}^{\mathbf{2}}$, $7^{\mathbf{4}}$, $\frac{21}{2}^{\mathbf{2}}$, $14^{\mathbf{2}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $\frac{7}{2}^{\mathbf{2}}$, $\frac{21}{2}^{\mathbf{2}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{13}}$	$0^{\mathbf{5}}$, $\frac{7}{2}^{\mathbf{4}}$, $7^{\mathbf{4}}$, $\frac{21}{2}^{\mathbf{4}}$, $14^{\mathbf{3}}$, $\frac{112}{3}^{\mathbf{96}}$, $\infty^{\mathbf{37}}$
125		$\frac{7}{3}^{\mathbf{3}}$, $7^{\mathbf{5}}$, $14^{\mathbf{6}}$, $\infty^{\mathbf{7}}$	$\frac{7}{3}^{\mathbf{3}}$, $7^{\mathbf{1}}$, $14^{\mathbf{2}}$, $\infty^{\mathbf{15}}$	$\frac{7}{3}^{\mathbf{6}}$, $7^{\mathbf{6}}$, $14^{\mathbf{8}}$, $\frac{119}{3}^{\mathbf{108}}$, $\infty^{\mathbf{43}}$
132		$0^{\mathbf{4}}$, $\frac{14}{3}^{\mathbf{3}}$, $7^{\mathbf{2}}$, $14^{\mathbf{6}}$, $\infty^{\mathbf{8}}$	$\frac{14}{3}^{\mathbf{3}}$, $7^{\mathbf{2}}$, $14^{\mathbf{1}}$, $\infty^{\mathbf{17}}$	$0^{\mathbf{4}}$, $\frac{14}{3}^{\mathbf{6}}$, $7^{\mathbf{4}}$, $14^{\mathbf{7}}$, $42^{\mathbf{121}}$, $\infty^{\mathbf{48}}$
139		$0^{\mathbf{9}}$, $7^{\mathbf{1}}$, $\frac{35}{4}^{\mathbf{4}}$, $14^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $7^{\mathbf{1}}$, $\frac{35}{4}^{\mathbf{4}}$, $\infty^{\mathbf{19}}$	$0^{\mathbf{10}}$, $7^{\mathbf{2}}$, $\frac{35}{4}^{\mathbf{8}}$, $14^{\mathbf{2}}$, $\frac{133}{3}^{\mathbf{135}}$, $\infty^{\mathbf{53}}$
146		$0^{\mathbf{5}}$, $7^{\mathbf{8}}$, $\frac{21}{2}^{\mathbf{2}}$, $14^{\mathbf{1}}$, $\frac{63}{2}^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $\frac{21}{2}^{\mathbf{2}}$, $14^{\mathbf{1}}$, $\frac{63}{2}^{\mathbf{2}}$, $\infty^{\mathbf{21}}$	$0^{\mathbf{6}}$, $7^{\mathbf{8}}$, $\frac{21}{2}^{\mathbf{4}}$, $14^{\mathbf{2}}$, $\frac{63}{2}^{\mathbf{4}}$, $\frac{140}{3}^{\mathbf{150}}$, $\infty^{\mathbf{57}}$
153		$\frac{14}{3}^{\mathbf{3}}$, $7^{\mathbf{8}}$, $14^{\mathbf{5}}$, $35^{\mathbf{4}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{1}}$, $35^{\mathbf{4}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{21}}$	$\frac{14}{3}^{\mathbf{6}}$, $7^{\mathbf{8}}$, $14^{\mathbf{6}}$, $35^{\mathbf{8}}$, $49^{\mathbf{163}}$, $126^{\mathbf{2}}$, $\infty^{\mathbf{60}}$
160		$0^{\mathbf{5}}$, $\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{8}}$, $35^{\mathbf{4}}$, $\frac{77}{2}^{\mathbf{2}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{10}}$	$\frac{14}{3}^{\mathbf{3}}$, $35^{\mathbf{4}}$, $\frac{77}{2}^{\mathbf{2}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{23}}$	$0^{\mathbf{5}}$, $\frac{14}{3}^{\mathbf{6}}$, $14^{\mathbf{8}}$, $35^{\mathbf{8}}$, $\frac{77}{2}^{\mathbf{4}}$, $\frac{154}{3}^{\mathbf{177}}$, $126^{\mathbf{2}}$, $\infty^{\mathbf{66}}$

167		$0^{11}, 7^1, \frac{28}{3}^3, 14^4, 35^2, \frac{77}{2}^4, 126^1, \infty^{10}$	$0^1, \frac{28}{3}^3, 35^2, \frac{77}{2}^4, 126^1, \infty^{25}$	$0^{12}, 7^1, \frac{28}{3}^6, 14^4, 35^4, \frac{77}{2}^8, \frac{161}{3}^{192}, 126^2, \infty^{71}$
174		$0^6, \frac{7}{2}^4, 7^8, \frac{28}{3}^3, \frac{63}{2}^2, \frac{77}{2}^4, 126^1, \infty^{11}$	$0^1, \frac{28}{3}^3, \frac{63}{2}^2, \frac{77}{2}^4, 126^1, \infty^{28}$	$0^7, \frac{7}{2}^4, 7^8, \frac{28}{3}^6, \frac{63}{2}^4, \frac{77}{2}^8, 56^{208}, 126^2, \infty^{78}$

Table 44: Slopes for $q = 8$, $i = 2$, type 4. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
2				
9				0^1
16				$\frac{7}{3}^3$
23				$\frac{14}{3}^6$
30				7^{10}
37		0^1	0^1	$0^2, \frac{28}{3}^{12}, \infty^1$
44		$\frac{7}{2}^2$	$\frac{7}{2}^2$	$\frac{7}{2}^4, \frac{35}{3}^{15}, \infty^2$
51		7^3	7^3	$7^6, 14^{19}, \infty^3$
58		$\frac{21}{2}^4$	$\frac{21}{2}^4$	$\frac{21}{2}^8, \frac{49}{3}^{24}, \infty^4$
65		$0^2, 14^3$	$0^1, 14^3, \infty^1$	$0^3, 14^6, \frac{56}{3}^{30}, \infty^6$
72		$\frac{7}{2}^2, 7^1, \frac{35}{2}^2, \infty^1$	$\frac{7}{2}^2, \frac{35}{2}^2, \infty^2$	$\frac{7}{2}^4, 7^1, \frac{35}{2}^4, 21^{37}, \infty^9$
79		$7^3, 14^1, 21^1, \infty^2$	$7^3, 21^1, \infty^3$	$7^6, 14^1, 21^2, \frac{70}{3}^{45}, \infty^{12}$
86		$\frac{21}{2}^4, 21^1, \infty^3$	$\frac{21}{2}^4, \infty^4$	$\frac{21}{2}^8, 21^1, \frac{77}{3}^{54}, \infty^{15}$
93		$0^3, 14^3, \infty^3$	$0^1, 14^3, \infty^5$	$0^4, 14^6, 28^{64}, \infty^{17}$
100		$\frac{7}{3}^3, 7^2, \frac{35}{2}^2, 63^1, \infty^3$	$\frac{7}{3}^3, \frac{35}{2}^2, 63^1, \infty^5$	$\frac{7}{3}^6, 7^2, \frac{35}{2}^4, \frac{91}{3}^{72}, 63^2, \infty^{19}$
107		$\frac{14}{3}^3, 7^2, 14^2, 21^1, 63^1, \infty^4$	$\frac{14}{3}^3, 7^2, 21^1, 63^1, \infty^6$	$\frac{14}{3}^6, 7^4, 14^2, 21^2, \frac{98}{3}^{81}, 63^2, \infty^{23}$
114		$7^1, \frac{28}{3}^6, 21^2, 70^2, \infty^4$	$7^1, \frac{28}{3}^6, 70^2, \infty^6$	$7^2, \frac{28}{3}^{12}, 21^2, 35^{91}, 70^4, \infty^{25}$
121		$0^4, \frac{35}{3}^6, 14^1, 70^2, \infty^4$	$0^1, \frac{35}{3}^6, 14^1, 70^2, \infty^7$	$0^5, \frac{35}{3}^{12}, 14^2, \frac{112}{3}^{102}, 70^4, \infty^{28}$
128		$\frac{7}{3}^3, \frac{7}{2}^4, 7^1, 14^2, \frac{49}{3}^3, 63^1, 77^1, \infty^4$	$\frac{7}{3}^3, 14^2, \frac{49}{3}^3, 63^1, 77^1, \infty^9$	$\frac{7}{3}^6, \frac{7}{2}^4, 7^1, 14^4, \frac{49}{3}^6, \frac{119}{3}^{114}, 63^2, 77^2, \infty^{32}$
135		$\frac{14}{3}^3, 7^4, 14^3, \frac{56}{3}^3, 63^1, 77^1, \infty^6$	$\frac{14}{3}^3, 7^2, \frac{56}{3}^3, 63^1, 77^1, \infty^{11}$	$\frac{14}{3}^6, 7^6, 14^3, \frac{56}{3}^6, 42^{127}, 63^2, 77^2, \infty^{38}$
142		$7^1, \frac{28}{3}^6, \frac{35}{2}^4, 21^2, 70^2, \infty^8$	$7^1, \frac{28}{3}^6, 21^1, 70^2, \infty^{13}$	$7^2, \frac{28}{3}^{12}, \frac{35}{2}^4, 21^3, \frac{133}{3}^{141}, 70^4, \infty^{44}$
149		$0^5, \frac{35}{3}^6, 14^1, 21^2, 70^2, \infty^9$	$0^1, \frac{35}{3}^6, 14^1, 70^2, \infty^{15}$	$0^6, \frac{35}{3}^{12}, 14^2, 21^2, \frac{140}{3}^{156}, 70^4, \infty^{49}$

156		$\frac{7}{2}^{\mathbf{10}}$, $14^{\mathbf{2}}$, $\frac{49}{3}^{\mathbf{3}}$, $\frac{63}{2}^{\mathbf{2}}$, $77^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$\frac{7}{2}^{\mathbf{2}}$, $14^{\mathbf{2}}$, $\frac{49}{3}^{\mathbf{3}}$, $\frac{63}{2}^{\mathbf{2}}$, $77^{\mathbf{1}}$, $\infty^{\mathbf{17}}$	$\frac{7}{2}^{\mathbf{12}}$, $14^{\mathbf{4}}$, $\frac{49}{3}^{\mathbf{6}}$, $\frac{63}{2}^{\mathbf{4}}$, $49^{\mathbf{172}}$, $77^{\mathbf{2}}$, $\infty^{\mathbf{53}}$
163		$\frac{14}{3}^{\mathbf{3}}$, $7^{\mathbf{5}}$, $14^{\mathbf{4}}$, $\frac{56}{3}^{\mathbf{3}}$, $\frac{133}{4}^{\mathbf{4}}$, $77^{\mathbf{1}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$\frac{14}{3}^{\mathbf{3}}$, $7^{\mathbf{1}}$, $\frac{56}{3}^{\mathbf{3}}$, $\frac{133}{4}^{\mathbf{4}}$, $77^{\mathbf{1}}$, $126^{\mathbf{1}}$, $\infty^{\mathbf{17}}$	$\frac{14}{3}^{\mathbf{6}}$, $7^{\mathbf{6}}$, $14^{\mathbf{4}}$, $\frac{56}{3}^{\mathbf{6}}$, $\frac{133}{4}^{\mathbf{8}}$, $\frac{154}{3}^{\mathbf{186}}$, $77^{\mathbf{2}}$, $126^{\mathbf{2}}$, $\infty^{\mathbf{56}}$
170		$\frac{49}{6}^{\mathbf{6}}$, $\frac{35}{2}^{\mathbf{8}}$, $21^{\mathbf{1}}$, $35^{\mathbf{2}}$, $\frac{77}{2}^{\mathbf{4}}$, $\frac{259}{2}^{\mathbf{2}}$, $\infty^{\mathbf{10}}$	$\frac{49}{6}^{\mathbf{6}}$, $21^{\mathbf{1}}$, $35^{\mathbf{2}}$, $\frac{77}{2}^{\mathbf{4}}$, $\frac{259}{2}^{\mathbf{2}}$, $\infty^{\mathbf{18}}$	$\frac{49}{6}^{\mathbf{12}}$, $\frac{35}{2}^{\mathbf{8}}$, $21^{\mathbf{2}}$, $35^{\mathbf{4}}$, $\frac{77}{2}^{\mathbf{8}}$, $\frac{161}{3}^{\mathbf{201}}$, $\frac{259}{2}^{\mathbf{4}}$, $\infty^{\mathbf{61}}$

Table 45: Slopes for $q = 8$, $i = 2$, type 5. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
5				
12				$0^{\mathbf{1}}$
19				$\frac{7}{3}^{\mathbf{3}}$
26				$\frac{14}{3}^{\mathbf{6}}$
33				$7^{\mathbf{10}}$
40				$\frac{28}{3}^{\mathbf{15}}$
47		$0^{\mathbf{1}}$	$0^{\mathbf{1}}$	$0^{\mathbf{2}}$, $\frac{35}{3}^{\mathbf{18}}$, $\infty^{\mathbf{1}}$
54		$0^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{1}}$, $\infty^{\mathbf{1}}$	$0^{\mathbf{2}}$, $14^{\mathbf{22}}$, $\infty^{\mathbf{4}}$
61		$0^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{1}}$, $\infty^{\mathbf{2}}$	$0^{\mathbf{2}}$, $\frac{49}{3}^{\mathbf{27}}$, $\infty^{\mathbf{7}}$
68		$0^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{2}}$, $\frac{56}{3}^{\mathbf{33}}$, $\infty^{\mathbf{10}}$
75		$14^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$14^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$14^{\mathbf{4}}$, $21^{\mathbf{40}}$, $\infty^{\mathbf{11}}$
82		$0^{\mathbf{1}}$, $14^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$14^{\mathbf{2}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $14^{\mathbf{4}}$, $\frac{70}{3}^{\mathbf{48}}$, $\infty^{\mathbf{13}}$
89		$0^{\mathbf{2}}$, $14^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$14^{\mathbf{2}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{2}}$, $14^{\mathbf{4}}$, $\frac{77}{3}^{\mathbf{57}}$, $\infty^{\mathbf{15}}$
96		$0^{\mathbf{3}}$, $14^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$14^{\mathbf{2}}$, $\infty^{\mathbf{6}}$	$0^{\mathbf{3}}$, $14^{\mathbf{4}}$, $28^{\mathbf{67}}$, $\infty^{\mathbf{17}}$
103		$0^{\mathbf{5}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{6}}$, $28^{\mathbf{2}}$, $\frac{91}{3}^{\mathbf{78}}$, $\infty^{\mathbf{19}}$
110		$0^{\mathbf{4}}$, $\frac{7}{2}^{\mathbf{2}}$, $28^{\mathbf{2}}$, $\infty^{\mathbf{3}}$	$0^{\mathbf{1}}$, $\frac{7}{2}^{\mathbf{2}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{7}}$	$0^{\mathbf{5}}$, $\frac{7}{2}^{\mathbf{4}}$, $28^{\mathbf{3}}$, $\frac{98}{3}^{\mathbf{87}}$, $\infty^{\mathbf{21}}$
117		$0^{\mathbf{3}}$, $7^{\mathbf{3}}$, $28^{\mathbf{3}}$, $\infty^{\mathbf{4}}$	$0^{\mathbf{1}}$, $7^{\mathbf{3}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{8}}$	$0^{\mathbf{4}}$, $7^{\mathbf{6}}$, $28^{\mathbf{4}}$, $35^{\mathbf{97}}$, $\infty^{\mathbf{25}}$
124		$0^{\mathbf{2}}$, $\frac{21}{2}^{\mathbf{4}}$, $28^{\mathbf{4}}$, $\infty^{\mathbf{5}}$	$0^{\mathbf{1}}$, $\frac{21}{2}^{\mathbf{4}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{3}}$, $\frac{21}{2}^{\mathbf{8}}$, $28^{\mathbf{5}}$, $\frac{112}{3}^{\mathbf{108}}$, $\infty^{\mathbf{29}}$
131		$\frac{7}{3}^{\mathbf{3}}$, $14^{\mathbf{3}}$, $28^{\mathbf{5}}$, $\infty^{\mathbf{6}}$	$\frac{7}{3}^{\mathbf{3}}$, $14^{\mathbf{3}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{10}}$	$\frac{7}{3}^{\mathbf{6}}$, $14^{\mathbf{6}}$, $28^{\mathbf{6}}$, $\frac{119}{3}^{\mathbf{120}}$, $\infty^{\mathbf{33}}$
138		$0^{\mathbf{2}}$, $\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $\frac{35}{2}^{\mathbf{2}}$, $28^{\mathbf{4}}$, $\infty^{\mathbf{6}}$	$\frac{14}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $\frac{35}{2}^{\mathbf{2}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{11}}$	$0^{\mathbf{2}}$, $\frac{14}{3}^{\mathbf{6}}$, $14^{\mathbf{4}}$, $\frac{35}{2}^{\mathbf{4}}$, $28^{\mathbf{5}}$, $42^{\mathbf{133}}$, $\infty^{\mathbf{36}}$
145		$0^{\mathbf{4}}$, $7^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $21^{\mathbf{1}}$, $28^{\mathbf{3}}$, $\infty^{\mathbf{7}}$	$7^{\mathbf{1}}$, $\frac{28}{3}^{\mathbf{3}}$, $14^{\mathbf{2}}$, $21^{\mathbf{1}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{13}}$	$0^{\mathbf{4}}$, $7^{\mathbf{2}}$, $\frac{28}{3}^{\mathbf{6}}$, $14^{\mathbf{4}}$, $21^{\mathbf{2}}$, $28^{\mathbf{4}}$, $\frac{133}{3}^{\mathbf{147}}$, $\infty^{\mathbf{41}}$
152		$0^{\mathbf{6}}$, $\frac{21}{2}^{\mathbf{2}}$, $14^{\mathbf{5}}$, $28^{\mathbf{2}}$, $\infty^{\mathbf{8}}$	$\frac{21}{2}^{\mathbf{2}}$, $14^{\mathbf{5}}$, $28^{\mathbf{1}}$, $\infty^{\mathbf{15}}$	$0^{\mathbf{6}}$, $\frac{21}{2}^{\mathbf{4}}$, $14^{\mathbf{10}}$, $28^{\mathbf{3}}$, $\frac{140}{3}^{\mathbf{162}}$, $\infty^{\mathbf{46}}$
159		$0^{\mathbf{9}}$, $14^{\mathbf{3}}$, $\frac{63}{4}^{\mathbf{4}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $14^{\mathbf{3}}$, $\frac{63}{4}^{\mathbf{4}}$, $\infty^{\mathbf{17}}$	$0^{\mathbf{10}}$, $14^{\mathbf{6}}$, $\frac{63}{4}^{\mathbf{8}}$, $49^{\mathbf{178}}$, $\infty^{\mathbf{51}}$
166		$0^{\mathbf{7}}$, $14^{\mathbf{4}}$, $\frac{35}{2}^{\mathbf{4}}$, $28^{\mathbf{1}}$, $\frac{63}{2}^{\mathbf{2}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $\frac{35}{2}^{\mathbf{4}}$, $28^{\mathbf{1}}$, $\frac{63}{2}^{\mathbf{2}}$, $\infty^{\mathbf{19}}$	$0^{\mathbf{8}}$, $14^{\mathbf{4}}$, $\frac{35}{2}^{\mathbf{8}}$, $28^{\mathbf{2}}$, $\frac{63}{2}^{\mathbf{4}}$, $\frac{154}{3}^{\mathbf{195}}$, $\infty^{\mathbf{55}}$
173		$0^{\mathbf{5}}$, $7^{\mathbf{2}}$, $14^{\mathbf{4}}$, $21^{\mathbf{3}}$, $28^{\mathbf{3}}$, $35^{\mathbf{4}}$, $\infty^{\mathbf{9}}$	$0^{\mathbf{1}}$, $7^{\mathbf{2}}$, $21^{\mathbf{3}}$, $28^{\mathbf{1}}$, $35^{\mathbf{4}}$, $\infty^{\mathbf{19}}$	$0^{\mathbf{6}}$, $7^{\mathbf{4}}$, $14^{\mathbf{4}}$, $21^{\mathbf{6}}$, $28^{\mathbf{4}}$, $35^{\mathbf{8}}$, $\frac{161}{3}^{\mathbf{210}}$, $\infty^{\mathbf{58}}$

Table 46: Slopes for $q = 8$, $i = 2$, type 6. Suspected newform slopes are marked in blue.

k	T_2-Slopes	$U_2^{P_0}$-Slopes	$U_2^{P_2}$-Slopes	$U_2^{\Gamma_0(t)}$-Slopes
1				
8				
15				0^1
22				$\frac{7}{3}^3$
29				$\frac{14}{3}^6$
36				7^{10}
43				$\frac{28}{3}^{15}$
50				$\frac{35}{3}^{21}$
57		0^1	0^1	0^2, 14^{25}, ∞^1
64		$\frac{7}{2}^2$	$\frac{7}{2}^2$	$\frac{7}{2}^4$, $\frac{49}{3}^{30}$, ∞^2
71		0^1, 7^1, ∞^1	0^1, 7^1, ∞^1	0^2, 7^2, $\frac{56}{3}^{36}$, ∞^5
78		$\frac{7}{2}^2$, ∞^2	$\frac{7}{2}^2$, ∞^2	$\frac{7}{2}^4$, 21^{43}, ∞^8
85		7^1, 14^2, ∞^2	7^1, 14^2, ∞^2	7^2, 14^4, $\frac{70}{3}^{51}$, ∞^9
92		$\frac{35}{2}^4$, ∞^2	$\frac{35}{2}^4$, ∞^2	$\frac{35}{2}^8$, $\frac{77}{3}^{60}$, ∞^{10}
99		0^1, 14^2, 21^2, ∞^2	14^2, 21^2, ∞^3	0^1, 14^4, 21^4, 28^{70}, ∞^{12}
106		7^1, $\frac{35}{2}^4$, ∞^3	$\frac{35}{2}^4$, ∞^4	7^1, $\frac{35}{2}^8$, $\frac{91}{3}^{81}$, ∞^{15}
113		0^3, 21^2, 28^1, ∞^3	0^1, 21^2, 28^1, ∞^5	0^4, 21^4, 28^2, $\frac{98}{3}^{93}$, ∞^{17}
120		$\frac{7}{3}^3$, 7^2, $\frac{63}{2}^2$, 63^1, ∞^3	$\frac{7}{3}^3$, $\frac{63}{2}^2$, 63^1, ∞^5	$\frac{7}{3}^6$, 7^2, $\frac{63}{2}^4$, 35^{103}, 63^2, ∞^{19}
127		0^2, $\frac{14}{3}^3$, 28^2, 35^1, 63^1, ∞^4	0^1, $\frac{14}{3}^3$, 28^1, 35^1, 63^1, ∞^6	0^3, $\frac{14}{3}^6$, 28^3, 35^2, $\frac{112}{3}^{114}$, 63^2, ∞^{23}
134		$\frac{7}{3}^3$, 7^2, $\frac{63}{2}^2$, 35^1, 63^1, ∞^6	$\frac{7}{3}^3$, 7^1, $\frac{63}{2}^2$, 63^1, ∞^8	$\frac{7}{3}^6$, 7^3, $\frac{63}{2}^4$, 35^1, $\frac{119}{3}^{126}$, 63^2, ∞^{29}
141		$\frac{14}{3}^3$, 14^2, 28^2, 35^1, 63^1, ∞^8	$\frac{14}{3}^3$, 14^2, 35^1, 63^1, ∞^{10}	$\frac{14}{3}^6$, 14^4, 28^2, 35^2, 42^{139}, 63^2, ∞^{35}
148		7^1, $\frac{49}{3}^6$, 35^2, 77^2, ∞^8	7^1, $\frac{49}{3}^6$, 77^2, ∞^{10}	7^2, $\frac{49}{3}^{12}$, 35^2, $\frac{133}{3}^{153}$, 77^4, ∞^{37}
155		0^2, 14^2, $\frac{56}{3}^6$, 28^1, 77^2, ∞^8	14^2, $\frac{56}{3}^6$, 77^2, ∞^{11}	0^2, 14^4, $\frac{56}{3}^{12}$, 28^1, $\frac{140}{3}^{168}$, 77^4, ∞^{40}
162		$\frac{7}{2}^4$, $\frac{49}{3}^6$, 21^2, 35^1, 77^2, ∞^8	$\frac{49}{3}^6$, 21^2, 77^2, ∞^{13}	$\frac{7}{2}^4$, $\frac{49}{3}^{12}$, 21^4, 35^1, 49^{184}, 77^4, ∞^{44}

169		$0^{\mathbf{5}}, 7^{\mathbf{2}}, \frac{56}{3}^{\mathbf{6}}, 28^{\mathbf{1}}, 77^{\mathbf{2}}, \infty^{\mathbf{9}}$	$0^{\mathbf{1}}, \frac{56}{3}^{\mathbf{6}}, 28^{\mathbf{1}}, 77^{\mathbf{2}}, \infty^{\mathbf{15}}$	$0^{\mathbf{6}}, 7^{\mathbf{2}}, \frac{56}{3}^{\mathbf{12}}, 28^{\mathbf{2}}, \frac{154}{3}^{\mathbf{201}}, 77^{\mathbf{4}}, \infty^{\mathbf{49}}$
176		$\frac{7}{2}^{\mathbf{10}}, 21^{\mathbf{2}}, \frac{91}{3}^{\mathbf{3}}, \frac{63}{2}^{\mathbf{2}}, 91^{\mathbf{1}}, \infty^{\mathbf{9}}$	$\frac{7}{2}^{\mathbf{2}}, 21^{\mathbf{2}}, \frac{91}{3}^{\mathbf{3}}, \frac{63}{2}^{\mathbf{2}}, 91^{\mathbf{1}}, \infty^{\mathbf{17}}$	$\frac{7}{2}^{\mathbf{12}}, 21^{\mathbf{4}}, \frac{91}{3}^{\mathbf{6}}, \frac{63}{2}^{\mathbf{4}}, \frac{161}{3}^{\mathbf{219}}, 91^{\mathbf{2}}, \infty^{\mathbf{53}}$

References

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