

$(m, i, k)$	$d_{m,i,k}$
$(2, 1, 1)$	$D$
$(3, 1, 1)$	$\frac{6(t+1)(t+9)}{t^2-18t-27}$
$(3, 1, 2)$	$-3d_{3,1,1}$
$(4, 1, 1)$	$t(t^2 - 1728)$
$(5, 1, 1)$	$-\frac{(t^2+1)(t^4-18t^3+74t^2+18t+1)}{2(t^4-12t^3+14t^2+12t+1)}$
$(5, 1, 2)$	$5d_{5,1,1}$
$(5, 2, 1)$	$-\frac{(t^2+1)(t^4-522t^3-10006t^2+522t+1)}{2(t^4+228t^3+494t^2-228t+1)}$
$(5, 2, 2)$	$5d_{5,2,1}$
$(6, 1, 1)$	$D$
$(6, 2, 1)$	$D$
$(6, 3, 1)$	$-td_{3,1,1}$
$(6, 3, 2)$	$3td_{3,1,1}$
$(7, 1, 1)$	$-\frac{t^{12}-18t^{11}+117t^{10}-354t^9+570t^8-486t^7+273t^6-222t^5+174t^4-46t^3-15t^2+6t+1}{2(t^2-t+1)(t^6-11t^5+30t^4-15t^3-10t^2+5t+1)}$
$(7, 1, 2)$	$-7d_{7,1,1}$
$(7, 2, 1)$	$-\frac{t^{12}-522t^{11}-8955t^{10}+37950t^9-70998t^8+131562t^7-253239t^6+316290t^5-218058t^4+80090t^3-14631t^2+510t+1}{2(t^2-t+1)(t^6+229t^5+270t^4-1695t^3+1430t^2-235t+1)}$
$(7, 2, 2)$	$-7d_{7,2,1}$
$(7, 3, 1)$	$\frac{7(t^4-6t^3+17t^2-24t+9)(3t^4-4t^3-5t^2-2t-1)(9t^4-12t^3-t^2+8t-3)}{2(t^2-3t-3)(t^2-t+1)(3t^2-9t+5)(5t^2-t-1)}$
$(7, 3, 2)$	$-7d_{7,3,1}$

TABLE IV: Twist parameters associated to maximal genus zero missing trace groups for  $m \leq 7$

$(m, i, k)$	$d_{m,i,k}$
$(8, 1, 1)$	$\frac{(t^2+2t-2)(t^2+10t-2)}{(t^2+2)(t^2+8t-2)}$
$(9, 1, 1)$	D
$(9, 2, 1)$	D
$(9, 3, 1)$	D
$(9, 4, 1)$	D
$(10, 1, 1)$	$\frac{-2t(t^2-11t-1)(t^4-12t^3+14t^2+12t+1)}{(t^2+1)(t^4-18t^3+74t^2+18t+1)}$
$(10, 1, 2)$	$5d_{10,1,1}$
$(10, 2, 1)$	$\frac{-2t(t^2-11t-1)(t^4+228t^3+494t^2-228t+1)}{(t^2+1)(t^4-522t^3-10006t^2+522t+1)}$
$(10, 2, 2)$	$5d_{10,2,1}$
$(10, 3, 1)$	D
$(12, 1, 1)$	$-\frac{3t(t^2-27)(t^2-3)}{t^4-18t^2-27}$
$(12, 2, 1)$	D
$(12, 3, 1)$	D
$(12, 4, 1)$	$\frac{6(27t^2+1)(243t^2+1)}{19683t^4+486t^2-1}$
$(12, 4, 2)$	$-3d_{12,4,1}$

TABLE V: Twist parameters associated to maximal genus zero missing trace groups for  $7 < m < 14$

$(m, i, k)$	$d_{m,i,k}$
$(14, 1, 1)$	$-\frac{t^{12}-522t^{11}-8955t^{10}+37950t^9-70998t^8+131562t^7-253239t^6+316290t^5-218058t^4+80090t^3-14631t^2+510t+1}{2(t^2-t+1)(t^6+229t^5+270t^4-1695t^3+1430t^2-235t+1)}$
$(14, 1, 2)$	$-7d_{7,2,1}$
$(14, 2, 1)$	$\frac{t^{12}-522t^{11}-8955t^{10}+37950t^9-70998t^8+131562t^7-253239t^6+316290t^5-218058t^4+80090t^3-14631t^2+510t+1}{-2t(t-1)(t^2-t+1)(t^3-8t^2+5t+1)(t^6+229t^5+270t^4-1695t^3+1430t^2-235t+1)}$
$(14, 2, 2)$	$-7d_{14,2,1}$
$(14, 3, 1)$	$\frac{7(t^4-6t^3+17t^2-24t+9)(3t^4-4t^3-5t^2-2t-1)(9t^4-12t^3-t^2+8t-3)}{2(t^2-3t-3)(t^2-t+1)(3t^2-9t+5)(5t^2-t-1)}$
$(14, 3, 2)$	$-7d_{14,3,1}$
$(14, 4, 1)$	$D$
$(14, 5, 1)$	$D$
$(14, 6, 1)$	$f_{14,2}(g_{14,6}(t))$
$(14, 6, 2)$	$-7d_{14,6,1}$
$(14, 7, 1)$	$f_{14,2}(g_{14,7}(t))$
$(14, 7, 2)$	$-7d_{14,7,1}$
$(28, 1, 1)$	$\frac{-7t(49t^4-13t^2+1)(2401t^4-245t^2+1)}{823543t^8-235298t^6+21609t^4-490t^2-1}$
$(28, 2, 1)$	$-d_{14,6,1}$
$(28, 2, 2)$	$-7d_{28,2,1}$
$(28, 3, 1)$	$-d_{14,7,1}$
$(28, 3, 2)$	$-7d_{28,3,1}$

TABLE VI: Twist parameters associated to maximal genus zero missing trace groups for  $m \geq 14$ (see Table I for the definitions of  $f_{m,i}(t)$ ,  $g_{m,i}(t)$  and  $h_{m,i}(t)$ )