

$$d = 6$$

$$\Psi_{\mathbb{Q}}(6) \supseteq \left\{ \begin{array}{l} (3), (4), (6), (7), (9), (10), (12), (13), (14), (15), (18), (21), (30), \\ (2, 2), (2, 6), (2, 10), (2, 12), (2, 14), (2, 18), (3, 3), (3, 6), (3, 9), (3, 12), (4, 4), (4, 12), (6, 6) \end{array} \right\}$$

G	$\Psi_{\mathbb{Q}}(6, G) \setminus \{G\} \supseteq$
()	{(3), (4), (6), (7), (9), (10), (12), (13), (14), (15), (18), (21), (2, 2), (2, 6), (2, 10), (2, 14), (2, 18), (3, 3), (3, 9), (4, 4), (4, 12), (6, 6)}
(2)	{(6), (12), (14), (18), (2, 6), (2, 14), (2, 18), (3, 6), (3, 12), (6, 6)}
(3)	{(9), (12), (21), (30), (2, 6), (3, 3), (3, 6), (3, 9), (4, 12), (6, 6)}
(4)	{(12), (2, 12), (3, 12)}
(5)	{(15), (30), (2, 10)}
(6)	{(18), (2, 18), (3, 6), (3, 12), (6, 6)}
(7)	{(2, 14)}
(8)	{}
(9)	{(2, 18), (3, 9)}
(10)	{}
(12)	{(3, 12)}
(2, 2)	{(2, 6), (2, 12), (6, 6)}
(2, 4)	{}
(2, 6)	{(6, 6)}
(2, 8)	{}

$$g_{\mathbb{Q}}(6) \geq 5 \quad \#\mathcal{G}_{\mathbb{Q}}(6) \geq 88 \quad M_{\mathbb{Q}}(6) \geq 5184$$

G	$\mathcal{H}_{\mathbb{Q}}(6, E)$	Label
()	(2, 2)	11a2
()	(2, 10)	121d1
()	(2, 14)	1922e1
()	(4, 4)	338b1
()	(6, 6)	108a2
()	(7)	1922c2
()	(2, 6), (3, 3)	196b2
()	(3), (2, 6)	196a1
()	(3), (2, 18)	1728e3
()	(3), (4, 12)	1296h1
()	(6), (2, 6)	361b2
()	(7), (2, 2)	26b2
()	(7), (4, 4)	338b2
()	(10), (2, 2)	75a2
()	(13), (2, 2)	147c1
()	(14), (2, 2)	208d1
()	(3), (6), (2, 2)	50b3
()	(3), (6), (2, 10)	1600q1
()	(3), (7), (2, 6)	5184u3
()	(3), (9), (2, 6)	361b1
()	(3), (10), (2, 6)	1600v3
()	(3), (12), (4, 4)	1296h2
()	(3), (18), (2, 2)	432e3
()	(3), (21), (2, 6)	5184u1
()	(4) ² , (2, 2)	648c1
()	(6), (2, 2), (3, 3)	44a2
()	(6), (2, 2), (3, 9)	486c2
()	(6) ² , (2, 2)	175b2
()	(6), (9), (2, 6)	1728e2
()	(12), (3, 3), (4, 4)	162d2
()	(18), (2, 2), (3, 9)	54a2
()	(3), (4) ² , (2, 6)	1296j1
()	(3), (4), (12), (2, 2)	1296j2
()	(3), (6), (7), (2, 2)	1296e2
()	(3), (6), (9), (2, 2)	175b1
()	(3), (6), (10), (2, 2)	400b1
()	(3), (6), (21), (2, 2)	1296e1

G	$\mathcal{H}_{\mathbb{Q}}(6, E)$	Label
()	$(4)^2, (7), (2, 2)$	338a1
()	$(4), (12), (2, 2), (3, 3)$	162a2
()	$(6)^2, (9), (2, 2)$	432a1
()	$(6), (7), (2, 2), (3, 3)$	162b4
()	$(6), (21), (2, 2), (3, 3)$	162b2
()	$(9)^2, (2, 6), (3, 3)$	27a2
()	$(3), (4)^2, (6), (2, 2)$	4050g2
()	$(6), (9)^2, (2, 2), (3, 3)$	19a2
()	$(6), (10), (15), (2, 2), (3, 3)$	50a4
(2)	$(2, 6)$	80b3
(2)	$(2, 14)$	49a1
(2)	(6)	80b1
(2)	$(6, 6)$	36a3
(2)	(12)	240b1
(2)	(14)	49a2
(2)	$(2, 6), (3, 6)$	20a3
(2)	$(6), (2, 18)$	98a1
(2)	$(6), (18)$	98a2
(2)	$(18), (2, 6)$	98a5
(2)	$(12), (2, 6), (3, 12)$	30a3
(2)	$(12)^2, (2, 6), (3, 6)$	30a7
(2)	$(18)^2, (2, 6), (3, 6)$	14a3
(3)	$(3, 3)$	196b1
(3)	$(6, 6)$	108a1
(3)	$(2, 6), (3, 3)$	44a1
(3)	$(2, 6), (3, 6)$	19a1
(3)	$(2, 6), (3, 9)$	486f1
(3)	$(3, 3), (4, 12)$	162d1
(3)	$(3, 9), (6, 6)$	27a1
(3)	$(2, 6), (3, 6), (3, 9)$	54a1
(3)	$(9), (2, 6), (3, 3)$	19a3
(3)	$(21), (2, 6), (3, 3)$	162b3
(3)	$(30), (2, 6), (3, 3)$	50a3
(3)	$(12)^2, (2, 6), (3, 3)$	162a1
(4)	$(2, 12)$	150c1
(4)	(12)	150c3
(4)	$(2, 12), (3, 12)$	90c1

G	$\mathcal{H}_{\mathbb{Q}}(6, E)$	Label
(5)	(2, 10)	11a1
(5)	(15), (30), (2, 10)	50b1
(6)	(3, 6)	20a1
(6)	(3, 12)	30a1
(6)	(6, 6)	36a1
(6)	(18), (2, 18), (3, 6)	14a4
(7)	(2, 14)	26b1
(9)	(2, 18), (3, 9)	54b3
(12)	(3, 12)	90c3
(2, 2)	(2, 6)	150c2
(2, 2)	(2, 12)	960o2
(2, 2)	(6, 6)	30a6
(2, 2)	(2, 12), (6, 6)	90c2
(2, 6)	(6, 6)	30a2