

126.b2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_6$	$r_E = 0$	$\Delta < 0$
126.b1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_6$	$r_E = 0$	$\Delta > 0$
130.a2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_6$	$r_E = 1$	$\Delta > 0$
130.a2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 11 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_6$	$r_E = 1$	$\Delta > 0$
130.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
130.a1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
136.a1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
156.a2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
170.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
182.d3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
205.a2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
205.a2	$p = 41$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 16 * 41^2 + O(41^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
220.a4	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_6$	$r_E = 1$	$\Delta > 0$
220.a2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
234.e1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 8 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
240.d1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$
315.b1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
320.a3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
320.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
325.d1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
370.d3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{3} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 2 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_6$	$r_E = 0$	$\Delta > 0$
370.d3	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 14 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_6$	$r_E = 0$	$\Delta > 0$
370.d1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
370.d1	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 37^3 + O(37^4)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
377.a2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 9 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$

377.a2	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 7 * 29^2 + O(29^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
378.e3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
378.g3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
434.d2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
434.d2	$p = 31$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
455.a2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 4 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
455.a2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 4 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
480.c3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 4 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
480.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_4$	$r_E = 1$	$\Delta > 0$
480.h2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$
510.e2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5 + O(5^2)$	$C_E = 4$	$ \text{III}_E  = 4$	$C_4$	$r_E = 0$	$\Delta > 0$
510.e2	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 17 + O(17^2)$	$C_E = 4$	$ \text{III}_E  = 4$	$C_4$	$r_E = 0$	$\Delta > 0$
520.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
520.b1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
530.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
530.b1	$p = 53$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 22 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
545.a2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5^6 + O(5^7)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
545.a2	$p = 109$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 105 * 109^2 + O(109^3)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
546.d3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
550.j1	$p = 11$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 5$	$q_p = 11 + O(11^2)$	$C_E = 1$	$ \text{III}_E  = 50$	$C_5$	$r_E = 0$	$\Delta < 0$
580.a1	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 7 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
580.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_2$	$r_E = 1$	$\Delta > 0$
620.b2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 30$	$C_2$	$r_E = 1$	$\Delta > 0$
624.b4	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
624.b2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$

651.b3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
651.b3	$p = 31$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 19 * 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
663.a4	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 10 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_4$	$r_E = 1$	$\Delta > 0$
680.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_2$	$r_E = 0$	$\Delta > 0$
693.b3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
702.m2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
702.p3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
730.e1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$
776.a1	$p = 97$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 88 * 97 + O(97^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
780.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 1$	$\Delta > 0$
798.d6	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 14 * 19 + O(19^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_6$	$r_E = 0$	$\Delta > 0$
798.d5	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 6 * 19^2 + O(19^3)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_6$	$r_E = 0$	$\Delta > 0$
806.f3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 8 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
819.c1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
832.f1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 10 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
845.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
880.b2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
903.b3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
910.e2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7^3 + O(7^4)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
910.g6	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 2 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_6$	$r_E = 0$	$\Delta > 0$
910.g4	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 4 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_6$	$r_E = 0$	$\Delta > 0$
915.b3	$p = 61$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
925.a1	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 24 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
938.d3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
938.d3	$p = 67$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 31 * 67 + O(67^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$

962.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 7 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
962.a1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 23 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
986.c1	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 21 * 29^2 + O(29^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
1020.c1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
1020.f1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 10 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_2$	$r_E = 0$	$\Delta > 0$
1118.a2	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
1118.a2	$p = 43$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 25 * 43 + O(43^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
1120.i3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 4 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
1120.i1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_4$	$r_E = 1$	$\Delta > 0$
1120.j2	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
1155.e4	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_4$	$r_E = 1$	$\Delta > 0$
1206.f1	$p = 67$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 22 * 67 + O(67^2)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_3$	$r_E = 0$	$\Delta < 0$
1300.d1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 10 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
1300.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 1$	$\Delta > 0$
1325.d1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 27 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
1342.b3	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 5$	$q_p = 16 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 25$	$C_5$	$r_E = 0$	$\Delta > 0$
1370.c1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^6 + O(5^7)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
1420.a2	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
1422.f1	$p = 79$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 21 * 79 + O(79^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
1445.c1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
1455.d1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
1480.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
1480.b1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 22 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
1560.l4	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 64$	$C_4$	$r_E = 0$	$\Delta > 0$
1570.d1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$

1570.d1	$p = 157$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 70 * 157 + O(157^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
1590.q4	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
1590.q4	$p = 53$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 35 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
1590.n3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 48$	$C_4$	$r_E = 0$	$\Delta > 0$
1590.n3	$p = 53$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 48$	$C_4$	$r_E = 0$	$\Delta > 0$
1638.f1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta < 0$
1638.f1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 12 * 13 + O(13^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta < 0$
1780.a1	$p = 89$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 49 * 89 + O(89^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
1780.b1	$p = 89$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 49 * 89^2 + O(89^3)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
1806.g3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
1856.n1	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
1890.k3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
1890.i2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
1890.r1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
1890.t2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
1920.j1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
1920.h1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
1920.w1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
1920.u1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 20$	$C_2$	$r_E = 0$	$\Delta > 0$
1928.a1	$p = 241$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 241 + O(241^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
1930.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
1953.f1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta < 0$
1953.f1	$p = 31$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 10 * 31 + O(31^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta < 0$
1961.a2	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 33 * 37^2 + O(37^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
1961.a2	$p = 53$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 36 * 53^2 + O(53^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$

1970.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
1970.a1	$p = 197$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 167 * 197 + O(197^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
1995.g3	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 16 * 19 + O(19^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
2040.f3	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 14 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_4$	$r_E = 1$	$\Delta > 0$
2074.a1	$p = 61$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 61^2 + O(61^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
2080.e1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 8 * 13 + O(13^2)$	$C_E = 4$	$ \text{III}_E  = 4$	$C_4$	$r_E = 0$	$\Delta > 0$
2080.d2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$
2091.b1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 17^3 + O(17^4)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
2091.b1	$p = 41$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 12 * 41 + O(41^2)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
2142.i1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7^3 + O(7^4)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
2163.d3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
2163.d3	$p = 103$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 92 * 103 + O(103^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
2172.a2	$p = 181$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 16 * 181 + O(181^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
2320.c1	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 7 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
2320.g1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
2330.d1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$
2378.d1	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 12 * 29^2 + O(29^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
2379.a2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
2379.a2	$p = 61$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 22 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
2405.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^7 + O(5^8)$	$C_E = 1$	$ \text{III}_E  = 14$	$C_2$	$r_E = 1$	$\Delta > 0$
2405.c1	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 14$	$C_2$	$r_E = 1$	$\Delta > 0$
2418.b1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 9 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
2457.f3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 8 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
2465.a1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 9 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 2$	$\Delta > 0$
2502.g3	$p = 139$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 62 * 139 + O(139^2)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_3$	$r_E = 0$	$\Delta < 0$

2562.f2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
2562.f2	$p = 61$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 19 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
2590.a2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
2590.a2	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 25 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
2595.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
2595.b1	$p = 173$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 115 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
2665.a1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
2709.b1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7^2 + O(7^3)$	$C_E = 9$	$ \text{III}_E  = 4$	$C_3$	$r_E = 0$	$\Delta < 0$
2709.b1	$p = 43$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 32 * 43 + O(43^2)$	$C_E = 9$	$ \text{III}_E  = 4$	$C_3$	$r_E = 0$	$\Delta < 0$
2718.o1	$p = 151$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 125 * 151 + O(151^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
2730.m4	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_6$	$r_E = 0$	$\Delta > 0$
2730.m5	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_6$	$r_E = 0$	$\Delta < 0$
2748.b2	$p = 229$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 165 * 229 + O(229^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
2810.d3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
2860.c1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
3094.e2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
3120.z1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
3130.g1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
3205.b2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5^8 + O(5^9)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
3205.b2	$p = 641$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 487 * 641^2 + O(641^3)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
3206.e3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
3206.e3	$p = 229$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 65 * 229 + O(229^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
3213.l2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7^3 + O(7^4)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta > 0$
3230.e3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
3255.c4	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 4 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_4$	$r_E = 1$	$\Delta > 0$

3294.k3	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 58 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
3324.b2	$p = 277$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 255 * 277 + O(277^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
3380.j1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
3380.c3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
3380.c1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_2$	$r_E = 1$	$\Delta > 0$
3392.p1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
3458.c2	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 9 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
3458.c2	$p = 19$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 18 * 19^2 + O(19^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
3474.h1	$p = 193$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 72 * 193 + O(193^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
3510.o2	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
3605.c3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
3605.c3	$p = 103$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 65 * 103 + O(103^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
3615.c3	$p = 241$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 16 * 241 + O(241^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_4$	$r_E = 1$	$\Delta > 0$
3655.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 1$	$\Delta > 0$
3740.b1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 17^2 + O(17^3)$	$C_E = 1$	$ \text{III}_E  = 48$	$C_2$	$r_E = 0$	$\Delta > 0$
3870.h1	$p = 43$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 22 * 43 + O(43^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
3874.f1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
3874.f1	$p = 149$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 27 * 149 + O(149^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
3885.c2	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 4 * 5 + O(5^2)$	$C_E = 4$	$ \text{III}_E  = 4$	$C_4$	$r_E = 0$	$\Delta > 0$
3885.c2	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 23 * 37 + O(37^2)$	$C_E = 4$	$ \text{III}_E  = 4$	$C_4$	$r_E = 0$	$\Delta > 0$
3906.a1	$p = 31$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 30 * 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
3962.c3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
3962.c3	$p = 283$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 209 * 283 + O(283^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
4070.d3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$
4070.d3	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 22 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$



4080.d1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 10 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
4080.bc1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
4123.b1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_3$	$r_E = 2$	$\Delta < 0$
4123.b1	$p = 31$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 13 * 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_3$	$r_E = 2$	$\Delta < 0$
4142.c2	$p = 109$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 77 * 109 + O(109^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
4158.b1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
4158.ba2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
4365.f1	$p = 97$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 52 * 97 + O(97^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
4446.j1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 108$	$C_3$	$r_E = 0$	$\Delta < 0$
4480.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
4480.l1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
4505.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^6 + O(5^7)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
4520.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
4580.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
4662.i1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7^3 + O(7^4)$	$C_E = 1$	$ \text{III}_E  = 108$	$C_3$	$r_E = 0$	$\Delta < 0$
4795.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
4826.b1	$p = 127$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 40 * 127 + O(127^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
4914.h2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 11 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
4914.l3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
4914.l3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 13 + O(13^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
4921.c2	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 11 * 19^2 + O(19^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
5110.b3	$p = 73$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 23 * 73 + O(73^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
5128.b1	$p = 641$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 241 * 641 + O(641^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
5180.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
5200.q1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 10 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$

5200.bh1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
5232.g2	$p = 109$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 22 * 109 + O(109^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
5246.b2	$p = 43$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 36 * 43^2 + O(43^3)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_3$	$r_E = 0$	$\Delta < 0$
5246.b2	$p = 61$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 12 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_3$	$r_E = 0$	$\Delta < 0$
5248.d1	$p = 41$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 32 * 41 + O(41^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
5248.c1	$p = 41$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 32 * 41 + O(41^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
5252.b1	$p = 101$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 81 * 101 + O(101^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
5300.c1	$p = 53$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
5420.a2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
5530.k2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
5530.k2	$p = 79$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 65 * 79 + O(79^2)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
5564.a2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
5780.d1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
5780.f3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
5780.f1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
5790.f3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 128$	$C_4$	$r_E = 0$	$\Delta > 0$
5805.g2	$p = 43$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 25 * 43 + O(43^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
5835.i3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
5835.i3	$p = 389$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 272 * 389 + O(389^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
5859.b3	$p = 31$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
5890.a3	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 14 * 19 + O(19^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
5910.l3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
5910.l3	$p = 197$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 77 * 197 + O(197^2)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
5916.c1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
5980.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^8 + O(5^9)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_2$	$r_E = 1$	$\Delta > 0$

6045.f1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 8 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
6045.g3	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 12 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
6095.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
6095.a1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 14 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
6118.i2	$p = 19$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 13 * 19 + O(19^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
6130.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
6130.b1	$p = 613$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 279 * 613 + O(613^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
6138.e1	$p = 31$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
6154.a1	$p = 181$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 22 * 181^2 + O(181^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
6220.a2	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
6253.a1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
6305.a1	$p = 97$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 72 * 97 + O(97^2)$	$C_E = 4$	$ \text{III}_E  = 1$	$C_2$	$r_E = 0$	$\Delta > 0$
6305.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^7 + O(5^8)$	$C_E = 1$	$ \text{III}_E  = 28$	$C_2$	$r_E = 0$	$\Delta > 0$
6305.b1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 7 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 28$	$C_2$	$r_E = 0$	$\Delta > 0$
6315.d3	$p = 421$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 74 * 421 + O(421^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
6405.i3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7^3 + O(7^4)$	$C_E = 1$	$ \text{III}_E  = 81$	$C_3$	$r_E = 0$	$\Delta > 0$
6489.c1	$p = 103$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 9 * 103 + O(103^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
6497.a3	$p = 73$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 73 + O(73^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
6497.a3	$p = 89$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 81 * 89 + O(89^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
6555.b4	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 4 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_4$	$r_E = 1$	$\Delta > 0$
6594.k2	$p = 157$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 112 * 157 + O(157^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
6606.i1	$p = 367$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 109 * 367 + O(367^2)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_3$	$r_E = 0$	$\Delta > 0$
6633.e1	$p = 67$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 45 * 67 + O(67^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
6780.g1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
6845.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$

6882.f3	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 17 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
6920.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
6920.a1	$p = 173$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 46 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
6980.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^7 + O(5^8)$	$C_E = 1$	$ \text{III}_E  = 42$	$C_2$	$r_E = 1$	$\Delta > 0$
7120.h1	$p = 89$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 49 * 89 + O(89^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
7120.c1	$p = 89$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 49 * 89^2 + O(89^3)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
7137.e1	$p = 61$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 58 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
7182.j1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7^2 + O(7^3)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta < 0$
7182.j1	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 13 * 19 + O(19^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta < 0$
7215.c3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 7 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$
7215.c3	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 13 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$
7254.b1	$p = 31$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 31^2 + O(31^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
7462.i1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
7566.j4	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 6 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 160$	$C_4$	$r_E = 0$	$\Delta > 0$
7592.c1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 7 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
7730.d1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
7730.d1	$p = 773$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 381 * 773 + O(773^2)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
7816.a1	$p = 977$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 291 * 977 + O(977^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
7820.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
7826.b1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_3$	$r_E = 2$	$\Delta < 0$
7826.b1	$p = 43$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 10 * 43 + O(43^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_3$	$r_E = 2$	$\Delta < 0$
7925.c1	$p = 317$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 127 * 317 + O(317^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
8194.e4	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 14 * 17 + O(17^2)$	$C_E = 4$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
8194.e4	$p = 241$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 227 * 241 + O(241^2)$	$C_E = 4$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
8220.a1	$p = 137$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 67 * 137 + O(137^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$

8235.f3	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
8242.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
8242.a1	$p = 317$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 22 * 317 + O(317^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
8320.k1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
8320.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
8320.i1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
8320.h1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
8355.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
8355.a1	$p = 557$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 202 * 557 + O(557^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
8370.e3	$p = 31$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
8414.g2	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
8442.a1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta > 0$
8442.a1	$p = 67$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 28 * 67 + O(67^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta > 0$
8508.a2	$p = 709$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 420 * 709 + O(709^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
8510.f3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 192$	$C_4$	$r_E = 0$	$\Delta > 0$
8510.f3	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 19 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 192$	$C_4$	$r_E = 0$	$\Delta > 0$
8530.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
8530.a1	$p = 853$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 728 * 853 + O(853^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
8554.f3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7^3 + O(7^4)$	$C_E = 1$	$ \text{III}_E  = 108$	$C_3$	$r_E = 0$	$\Delta < 0$
8585.d3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 4$	$ \text{III}_E  = 1$	$C_2$	$r_E = 0$	$\Delta > 0$
8685.f1	$p = 193$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 121 * 193 + O(193^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
8694.b1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7^4 + O(7^5)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_3$	$r_E = 0$	$\Delta > 0$
8694.l3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7^4 + O(7^5)$	$C_E = 1$	$ \text{III}_E  = 144$	$C_3$	$r_E = 0$	$\Delta > 0$
8745.h3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$
8745.h3	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 21 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$

8755.a2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 4 * 5^8 + O(5^9)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
8757.d1	$p = 139$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 77 * 139 + O(139^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
8770.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
8770.b1	$p = 877$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 322 * 877 + O(877^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
8778.i2	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 19 + O(19^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
8796.a2	$p = 733$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 612 * 733 + O(733^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
8810.f3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 64$	$C_4$	$r_E = 0$	$\Delta > 0$
8827.c3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
8827.c3	$p = 97$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 16 * 97 + O(97^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
8938.a1	$p = 109$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 41 * 109^2 + O(109^3)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
8996.a1	$p = 173$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 135 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
9030.j4	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 4 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_6$	$r_E = 0$	$\Delta < 0$
9030.j3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 6$	$q_p = 5 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_6$	$r_E = 0$	$\Delta > 0$
9061.b3	$p = 41$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 27 * 41^2 + O(41^3)$	$C_E = 4$	$ \text{III}_E  = 8$	$C_4$	$r_E = 0$	$\Delta > 0$
9061.b2	$p = 41$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 32 * 41^4 + O(41^5)$	$C_E = 1$	$ \text{III}_E  = 64$	$C_2 \times C_2$	$r_E = 0$	$\Delta > 0$
9074.a1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
9074.a1	$p = 349$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 54 * 349 + O(349^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
9135.g1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7^5 + O(7^6)$	$C_E = 1$	$ \text{III}_E  = 90$	$C_3$	$r_E = 0$	$\Delta < 0$
9146.a1	$p = 269$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 76 * 269^2 + O(269^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
9243.d3	$p = 79$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 58 * 79 + O(79^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
9367.a1	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 26 * 29^2 + O(29^3)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
9394.l3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
9394.l3	$p = 61$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 40 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
9490.d3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 13^4 + O(13^5)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta > 0$
9546.d1	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 19 * 37^2 + O(37^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$

9590.i3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 96$	$C_4$	$r_E = 0$	$\Delta > 0$
9605.b1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
9605.b1	$p = 113$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 113 + O(113^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
9618.e3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
9618.e3	$p = 229$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 149 * 229 + O(229^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
9795.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
9795.a1	$p = 653$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 336 * 653 + O(653^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
9842.a3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_3$	$r_E = 2$	$\Delta > 0$
9842.a3	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 9 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_3$	$r_E = 2$	$\Delta > 0$
9860.b1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
9948.a2	$p = 829$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 530 * 829 + O(829^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
10010.h1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7^3 + O(7^4)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
10030.j4	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 5^6 + O(5^7)$	$C_E = 1$	$ \text{III}_E  = 672$	$C_4$	$r_E = 0$	$\Delta > 0$
10062.d1	$p = 43$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 21 * 43 + O(43^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
10155.c1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
10155.c1	$p = 677$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 573 * 677 + O(677^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
10180.a1	$p = 509$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 38 * 509 + O(509^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
10180.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
10220.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
10234.d2	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
10255.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
10255.b1	$p = 293$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 125 * 293 + O(293^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
10262.d3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
10262.d3	$p = 733$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 146 * 733 + O(733^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
10480.l2	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$

10582.a3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
10582.a3	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 37^2 + O(37^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
10585.b1	$p = 73$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 64 * 73^2 + O(73^3)$	$C_E = 4$	$ \text{III}_E  = 2$	$C_2$	$r_E = 0$	$\Delta > 0$
10621.c3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 11 * 13 + O(13^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
10621.c3	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 12 * 19 + O(19^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
10634.a1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
10672.f2	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
10790.h3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 192$	$C_4$	$r_E = 0$	$\Delta > 0$
10790.h3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 7 * 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 192$	$C_4$	$r_E = 0$	$\Delta > 0$
10865.b1	$p = 53$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 53^2 + O(53^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
10880.bd1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$
10880.e1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$
10906.k3	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 17 * 19^2 + O(19^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
10930.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
10930.a1	$p = 1093$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 590 * 1093 + O(1093^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
10990.g3	$p = 157$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 54 * 157 + O(157^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
11072.b1	$p = 173$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 25 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
11080.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
11080.b1	$p = 277$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 221 * 277 + O(277^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
11136.c1	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 15 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
11136.p1	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 15 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
11142.f1	$p = 619$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 524 * 619 + O(619^2)$	$C_E = 1$	$ \text{III}_E  = 180$	$C_3$	$r_E = 0$	$\Delta < 0$
11170.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
11170.b1	$p = 1117$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 834 * 1117 + O(1117^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
11180.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_2$	$r_E = 0$	$\Delta > 0$



11382.e1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
11382.e1	$p = 271$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 87 * 271 + O(271^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
11394.g3	$p = 211$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 173 * 211 + O(211^2)$	$C_E = 4$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
11440.d1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
11554.f1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 26 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
11554.f1	$p = 109$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 53 * 109 + O(109^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
11648.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
11648.r1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
11674.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
11718.e1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
11718.e1	$p = 31$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 29 * 31 + O(31^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
11914.b3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7^3 + O(7^4)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
11948.a2	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 25 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
11951.d1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 23 * 37^2 + O(37^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
12080.n2	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
12116.b1	$p = 233$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 121 * 233 + O(233^2)$	$C_E = 1$	$ \text{III}_E  = 3$	$C_2$	$r_E = 1$	$\Delta > 0$
12194.b1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta < 0$
12194.b1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 11 * 13 + O(13^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta < 0$
12215.d3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta > 0$
12285.l1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
12285.l1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 13 + O(13^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
12370.d1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
12370.d1	$p = 1237$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 743 * 1237 + O(1237^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
12545.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 60$	$C_2$	$r_E = 0$	$\Delta > 0$
12545.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 60$	$C_2$	$r_E = 0$	$\Delta > 0$

12580.a1	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 17 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
12805.a1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
12805.a1	$p = 197$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 153 * 197 + O(197^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
12831.b1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
12999.b2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
12999.b2	$p = 619$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 418 * 619 + O(619^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
13296.b2	$p = 277$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 136 * 277 + O(277^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
13447.a1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 7 * 17^4 + O(17^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$
13455.e1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
13520.bc3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
13520.bc1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
13520.f1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
13538.d3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 4$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
13542.e1	$p = 61$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 22 * 61^2 + O(61^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
13576.a1	$p = 1697$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 585 * 1697 + O(1697^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
13580.k1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
13676.d2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_2$	$r_E = 1$	$\Delta > 0$
13780.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 48$	$C_2$	$r_E = 0$	$\Delta > 0$
13797.e3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
13797.e3	$p = 73$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 30 * 73 + O(73^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
13870.e3	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 19^2 + O(19^3)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta > 0$
13870.e3	$p = 73$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 62 * 73 + O(73^2)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta > 0$
13871.a1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
13884.e1	$p = 89$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 54 * 89^2 + O(89^3)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_2$	$r_E = 0$	$\Delta > 0$
13930.d2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$

13930.d2	$p = 199$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 107 * 199 + O(199^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
13930.i3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
13930.i3	$p = 199$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 134 * 199 + O(199^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
13940.d1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 16 * 17 + O(17^2)$	$C_E = 4$	$ \text{III}_E  = 1$	$C_2$	$r_E = 0$	$\Delta > 0$
13980.a1	$p = 233$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 233 + O(233^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
14045.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
14118.d3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 11 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
14130.f1	$p = 157$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 111 * 157 + O(157^2)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_3$	$r_E = 0$	$\Delta < 0$
14180.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
14315.c3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
14315.c3	$p = 409$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 35 * 409 + O(409^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
14404.b1	$p = 277$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 69 * 277 + O(277^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
14404.a1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 9 * 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
14539.e3	$p = 31$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 13 * 31^2 + O(31^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
14539.e3	$p = 67$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 13 * 67 + O(67^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
14656.o1	$p = 229$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 212 * 229 + O(229^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
14705.a1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 15 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 2$	$\Delta > 0$
14920.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
14920.c1	$p = 373$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 216 * 373 + O(373^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
14960.c1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 17^2 + O(17^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
14966.c1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
14966.c1	$p = 1069$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 785 * 1069 + O(1069^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
15022.g4	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 8 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 48$	$C_4$	$r_E = 0$	$\Delta > 0$
15022.g4	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 20 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 48$	$C_4$	$r_E = 0$	$\Delta > 0$
15195.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$

15195.c1	$p = 1013$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 463 * 1013 + O(1013^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
15340.c1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 13^4 + O(13^5)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 1$	$\Delta > 0$
15380.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 30$	$C_2$	$r_E = 1$	$\Delta > 0$
15420.a1	$p = 257$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 54 * 257 + O(257^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
15545.b2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5^10 + O(5^{11})$	$C_E = 1$	$ \text{III}_E  = 20$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
15545.b2	$p = 3109$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2530 * 3109^2 + O(3109^3)$	$C_E = 1$	$ \text{III}_E  = 20$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
15666.b1	$p = 373$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 144 * 373 + O(373^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
15694.b1	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 14 * 19^2 + O(19^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
15916.b2	$p = 173$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 124 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
16130.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
16130.c1	$p = 1613$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 1280 * 1613 + O(1613^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
16146.e2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
16146.n2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 11 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
16220.a2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
16254.a2	$p = 43$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 21 * 43 + O(43^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
16405.a1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 7 * 17^3 + O(17^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
16405.a1	$p = 193$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 159 * 193 + O(193^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
16555.d3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
16620.f1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
16642.d1	$p = 53$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 18 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
16642.d1	$p = 157$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 66 * 157 + O(157^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
16870.a3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
16870.a3	$p = 241$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 178 * 241 + O(241^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
16880.i2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
17195.a2	$p = 181$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 130 * 181 + O(181^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$

17300.a1	$p = 173$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 25 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
17394.f3	$p = 223$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 59 * 223 + O(223^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
17436.a2	$p = 1453$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 1425 * 1453 + O(1453^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
17468.b2	$p = 397$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 279 * 397 + O(397^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
17612.d1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 12 * 17^2 + O(17^3)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 1$	$\Delta > 0$
17797.b1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
18020.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
18090.r3	$p = 67$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 45 * 67 + O(67^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
18124.a2	$p = 197$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 188 * 197 + O(197^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
18165.b3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$
18165.b3	$p = 173$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 112 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$
18284.a2	$p = 653$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 207 * 653 + O(653^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
18320.g1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
18460.e1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
18486.e1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 13 + O(13^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta > 0$
18486.e1	$p = 79$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 78 * 79 + O(79^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta > 0$
18649.b1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 9 * 17^2 + O(17^3)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
18649.b1	$p = 1097$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 418 * 1097 + O(1097^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
18752.l1	$p = 293$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 198 * 293 + O(293^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
18910.c1	$p = 31$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
18925.c1	$p = 757$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 701 * 757 + O(757^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
18990.n1	$p = 211$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 63 * 211 + O(211^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
19045.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 7 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
19045.a1	$p = 293$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 213 * 293 + O(293^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
19045.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 14$	$C_2$	$r_E = 1$	$\Delta > 0$

19045.b1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 13^7 + O(13^8)$	$C_E = 1$	$ \text{III}_E  = 14$	$C_2$	$r_E = 1$	$\Delta > 0$
19186.g1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 12 * 53^3 + O(53^4)$	$C_E = 9$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
19186.g1	$p = 181$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 128 * 181 + O(181^2)$	$C_E = 9$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
19330.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
19330.b1	$p = 1933$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 977 * 1933 + O(1933^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
19336.b1	$p = 2417$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2155 * 2417 + O(2417^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
19474.d2	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 180$	$C_3$	$r_E = 0$	$\Delta < 0$
19570.e3	$p = 19$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 13 * 19 + O(19^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta > 0$
19635.j5	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 4 * 5 + O(5^2)$	$C_E = 4$	$ \text{III}_E  = 8$	$C_4$	$r_E = 0$	$\Delta > 0$
19635.j5	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 11 * 17 + O(17^2)$	$C_E = 4$	$ \text{III}_E  = 8$	$C_4$	$r_E = 0$	$\Delta > 0$
19815.b4	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
19885.c1	$p = 97$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 43 * 97 + O(97^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
20028.b2	$p = 1669$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 389 * 1669 + O(1669^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
20070.o1	$p = 223$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 91 * 223 + O(223^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
20083.b3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7^2 + O(7^3)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta > 0$
20083.b3	$p = 19$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 12 * 19 + O(19^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta > 0$
20083.b3	$p = 151$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 121 * 151 + O(151^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta > 0$
20140.e1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 50 * 53^4 + O(53^5)$	$C_E = 1$	$ \text{III}_E  = 48$	$C_2$	$r_E = 0$	$\Delta > 0$
20180.a1	$p = 1009$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 335 * 1009 + O(1009^2)$	$C_E = 1$	$ \text{III}_E  = 3$	$C_2$	$r_E = 1$	$\Delta > 0$
20208.b2	$p = 421$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 122 * 421 + O(421^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
20352.k1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 33 * 53^3 + O(53^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
20352.be1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 33 * 53^3 + O(53^4)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_2$	$r_E = 0$	$\Delta > 0$
20605.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 30$	$C_2$	$r_E = 1$	$\Delta > 0$
20605.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 13^5 + O(13^6)$	$C_E = 1$	$ \text{III}_E  = 30$	$C_2$	$r_E = 1$	$\Delta > 0$
20720.11	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$

20740.a1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 17^2 + O(17^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
20740.b1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
20826.l1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 8 * 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 216$	$C_3$	$r_E = 0$	$\Delta < 0$
20878.f3	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
20915.b3	$p = 89$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 67 * 89 + O(89^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_4$	$r_E = 1$	$\Delta > 0$
21008.b1	$p = 101$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 81 * 101 + O(101^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
21180.c1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_2$	$r_E = 0$	$\Delta > 0$
21200.w1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
21242.a3	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
21242.a3	$p = 43$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 38 * 43 + O(43^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
21346.b1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
21346.b1	$p = 821$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 462 * 821 + O(821^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
21385.e4	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 160$	$C_4$	$r_E = 0$	$\Delta > 0$
21385.e4	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 7 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 160$	$C_4$	$r_E = 0$	$\Delta > 0$
21460.c1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 37^2 + O(37^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
21460.f1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 29 * 37^2 + O(37^3)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
21472.d3	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 41 * 61^2 + O(61^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
21472.d1	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 38 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_4$	$r_E = 1$	$\Delta > 0$
21472.e2	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 23 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_4$	$r_E = 0$	$\Delta > 0$
21530.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
21692.a1	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
21845.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$
21845.c1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^6 + O(5^7)$	$C_E = 1$	$ \text{III}_E  = 60$	$C_2$	$r_E = 1$	$\Delta > 0$
21905.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$
21925.a1	$p = 877$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 401 * 877 + O(877^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$

22180.a1	$p = 1109$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 441 * 1109 + O(1109^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
22274.f3	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 24 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
22395.e1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
22395.e1	$p = 1493$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 1425 * 1493 + O(1493^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
22516.a1	$p = 433$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 49 * 433 + O(433^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
22562.a1	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 12 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
22562.a1	$p = 389$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 363 * 389 + O(389^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
22594.b2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 8 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
22755.c4	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5 + O(5^2)$	$C_E = 4$	$ \text{III}_E  = 4$	$C_4$	$r_E = 0$	$\Delta > 0$
22755.c4	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 22 * 37 + O(37^2)$	$C_E = 4$	$ \text{III}_E  = 4$	$C_4$	$r_E = 0$	$\Delta > 0$
22778.e1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
22778.e1	$p = 1627$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 1177 * 1627 + O(1627^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
22865.a1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 17 + O(17^2)$	$C_E = 4$	$ \text{III}_E  = 1$	$C_2$	$r_E = 0$	$\Delta > 0$
22890.l1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
22890.l1	$p = 109$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 44 * 109 + O(109^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
22940.a1	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 20 * 37^2 + O(37^3)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 1$	$\Delta > 0$
23086.f3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_3$	$r_E = 0$	$\Delta < 0$
23120.u1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
23120.i3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
23120.i1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
23254.d3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
23254.d3	$p = 151$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 85 * 151 + O(151^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
23330.i1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
23330.i1	$p = 2333$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 597 * 2333 + O(2333^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
23403.e1	$p = 29$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 10 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$



23403.e1	$p = 269$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 193 * 269 + O(269^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
23452.e1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
23545.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
23545.b1	$p = 277$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 17 * 277 + O(277^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
23555.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
23664.i1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
23680.o1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
23680.d1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
23732.a1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
23902.e3	$p = 19$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 17 * 19 + O(19^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
23920.o1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^8 + O(5^9)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_2$	$r_E = 0$	$\Delta > 0$
23959.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
23959.a1	$p = 97$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 71 * 97^2 + O(97^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
24099.a3	$p = 277$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 66 * 277 + O(277^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
24328.b1	$p = 3041$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 98 * 3041 + O(3041^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
24580.a1	$p = 1229$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 187 * 1229 + O(1229^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
24766.d1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
24766.d1	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 11 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
24820.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
24853.a2	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 7 * 29^4 + O(29^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
24853.a2	$p = 857$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 787 * 857^2 + O(857^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
24930.l1	$p = 277$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 226 * 277 + O(277^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
24980.a1	$p = 1249$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 805 * 1249 + O(1249^2)$	$C_E = 1$	$ \text{III}_E  = 3$	$C_2$	$r_E = 1$	$\Delta > 0$
25160.h3	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 5 * 17 + O(17^2)$	$C_E = 4$	$ \text{III}_E  = 8$	$C_4$	$r_E = 0$	$\Delta > 0$
25160.h3	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 35 * 37 + O(37^2)$	$C_E = 4$	$ \text{III}_E  = 8$	$C_4$	$r_E = 0$	$\Delta > 0$

25185.c3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 64$	$C_4$	$r_E = 0$	$\Delta > 0$
25220.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
25326.f2	$p = 67$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 57 * 67 + O(67^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
25470.g3	$p = 283$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 66 * 283 + O(283^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
25491.a1	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
25491.a1	$p = 293$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 223 * 293 + O(293^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
25604.b1	$p = 173$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 169 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
25655.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
25655.a1	$p = 733$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 579 * 733 + O(733^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
25690.p3	$p = 367$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 168 * 367 + O(367^2)$	$C_E = 4$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
25803.f1	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 61^2 + O(61^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta > 0$
25805.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
25805.b1	$p = 397$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 351 * 397 + O(397^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
25870.c3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 240$	$C_4$	$r_E = 0$	$\Delta > 0$
25870.c3	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 2 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 240$	$C_4$	$r_E = 0$	$\Delta > 0$
26076.c1	$p = 41$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 34 * 41 + O(41^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
26120.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
26120.b1	$p = 653$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 220 * 653 + O(653^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
26156.a2	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 9 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
26187.g1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
26190.h1	$p = 97$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 23 * 97 + O(97^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
26190.m3	$p = 97$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 29 * 97 + O(97^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
26330.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 40$	$C_2$	$r_E = 0$	$\Delta > 0$
26474.b3	$p = 31$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 23 * 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
26838.t1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7^4 + O(7^5)$	$C_E = 1$	$ \text{III}_E  = 144$	$C_3$	$r_E = 0$	$\Delta < 0$

26962.g3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 11 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
26962.g3	$p = 61$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 9 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
27027.i1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta < 0$
27027.i1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 13 + O(13^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta < 0$
27055.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
27055.a1	$p = 773$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 703 * 773 + O(773^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
27105.f3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
27105.f3	$p = 139$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 8 * 139 + O(139^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
27120.n1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
27161.b2	$p = 157$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 75 * 157^2 + O(157^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
27161.b2	$p = 173$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 106 * 173^2 + O(173^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
27380.c3	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
27380.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_2$	$r_E = 1$	$\Delta > 0$
27572.a1	$p = 113$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 62 * 113 + O(113^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
27741.b1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7^2 + O(7^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
27741.b1	$p = 1321$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 831 * 1321 + O(1321^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
27770.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
27790.h2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
27790.h2	$p = 397$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 136 * 397 + O(397^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
27794.k3	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 10 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
27794.k3	$p = 1069$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 948 * 1069 + O(1069^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
27824.d2	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 16 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
27898.f2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 9 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
27898.f2	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 24 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
27920.l1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^7 + O(5^8)$	$C_E = 1$	$ \text{III}_E  = 14$	$C_2$	$r_E = 1$	$\Delta > 0$

27970.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
27970.a1	$p = 2797$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 690 * 2797 + O(2797^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
28095.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 24$	$C_2$	$r_E = 0$	$\Delta > 0$
28145.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
28210.b2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 12 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
28372.a1	$p = 173$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 85 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
28595.d3	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 19^3 + O(19^4)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
28769.a2	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 9 * 13^6 + O(13^7)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
28769.a2	$p = 2213$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 837 * 2213^2 + O(2213^3)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
28854.i1	$p = 229$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 8 * 229 + O(229^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
28970.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
29020.a2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_2$	$r_E = 1$	$\Delta > 0$
29036.h1	$p = 61$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 59 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
29300.c1	$p = 293$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 198 * 293 + O(293^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
29638.k3	$p = 73$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 59 * 73 + O(73^2)$	$C_E = 1$	$ \text{III}_E  = 72$	$C_3$	$r_E = 0$	$\Delta < 0$
29708.a2	$p = 1061$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 807 * 1061 + O(1061^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
29711.g2	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 27 * 37^2 + O(37^3)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
29778.j2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
29778.j2	$p = 709$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 377 * 709 + O(709^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
29862.s3	$p = 79$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 70 * 79 + O(79^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
29955.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
29955.a1	$p = 1997$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 459 * 1997 + O(1997^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
30155.a3	$p = 163$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 98 * 163^2 + O(163^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta > 0$
30310.d2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta < 0$
30818.b3	$p = 811$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 110 * 811 + O(811^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$

31086.i1	$p = 157$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 46 * 157 + O(157^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
31174.c1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 10 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
31257.a1	$p = 151$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 26 * 151 + O(151^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
31280.t1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
31348.b1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 15 * 17^2 + O(17^3)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
31390.d3	$p = 73$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 69 * 73 + O(73^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
31420.a2	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
31700.a1	$p = 317$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 16 * 317 + O(317^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
31880.b1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
31880.b1	$p = 797$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 7 * 797 + O(797^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
31934.a3	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 27$	$C_3$	$r_E = 0$	$\Delta > 0$
31954.a1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 7 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
31954.a1	$p = 1229$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 586 * 1229 + O(1229^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
32108.b2	$p = 349$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 31 * 349 + O(349^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
32185.a1	$p = 157$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 28 * 157^2 + O(157^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
32396.d1	$p = 13$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
32445.e1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta > 0$
32445.e1	$p = 103$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 35 * 103 + O(103^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta > 0$
32708.b1	$p = 37$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 17 * 37^2 + O(37^3)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 1$	$\Delta > 0$
32718.d2	$p = 19$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 19 + O(19^2)$	$C_E = 1$	$ \text{III}_E  = 144$	$C_3$	$r_E = 0$	$\Delta < 0$
32860.a1	$p = 53$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 27 * 53^2 + O(53^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
32880.t1	$p = 137$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 67 * 137 + O(137^2)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
32922.d1	$p = 31$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 29 * 31^2 + O(31^3)$	$C_E = 4$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
33054.g2	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
33054.g2	$p = 787$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 641 * 787 + O(787^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$

33263.c1	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 29^3 + O(29^4)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
33263.c1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 23 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
33524.a1	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
33553.a1	$p = 89$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 34 * 89 + O(89^2)$	$C_E = 4$	$ \text{III}_E  = 1$	$C_2$	$r_E = 0$	$\Delta > 0$
33555.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
33555.a1	$p = 2237$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2189 * 2237 + O(2237^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
33564.a2	$p = 2797$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 1963 * 2797 + O(2797^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
33730.d1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
33730.d1	$p = 3373$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 1651 * 3373 + O(3373^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
33794.a1	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 55 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
33794.a1	$p = 277$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 262 * 277 + O(277^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
33822.e1	$p = 1879$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 910 * 1879 + O(1879^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
33839.a1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 13^2 + O(13^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
33915.j1	$p = 19$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 15 * 19^2 + O(19^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
33920.j1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 21 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
33920.i1	$p = 53$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 21 * 53 + O(53^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
33928.b1	$p = 4241$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 468 * 4241 + O(4241^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
34131.c1	$p = 31$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 13 * 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
34131.c1	$p = 367$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 128 * 367 + O(367^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
34180.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^7 + O(5^8)$	$C_E = 1$	$ \text{III}_E  = 42$	$C_2$	$r_E = 1$	$\Delta > 0$
34480.b2	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
34765.b3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 2$	$\Delta > 0$
34818.c3	$p = 829$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 642 * 829 + O(829^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
34895.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
34895.b1	$p = 997$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 643 * 997 + O(997^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$

35049.d3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7 + O(7^2)$	$C_E = 4$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
35049.d3	$p = 1669$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 425 * 1669 + O(1669^2)$	$C_E = 4$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
35068.b2	$p = 797$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 782 * 797 + O(797^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
35126.b3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
35126.b3	$p = 193$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 160 * 193 + O(193^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
35292.c1	$p = 173$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 105 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
35415.a1	$p = 787$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 397 * 787 + O(787^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
35570.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
35570.b1	$p = 3557$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 1805 * 3557 + O(3557^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
35580.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
35620.f1	$p = 137$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 117 * 137 + O(137^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
35620.d1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
35620.g1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
35655.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
35657.b2	$p = 181$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 13 * 181^2 + O(181^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
35657.b2	$p = 197$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 100 * 197^2 + O(197^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2 \times C_2$	$r_E = 1$	$\Delta > 0$
35658.c1	$p = 283$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 217 * 283 + O(283^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
35910.l3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
35910.l3	$p = 19$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 19 + O(19^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
35910.o2	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 7^3 + O(7^4)$	$C_E = 1$	$ \text{III}_E  = 54$	$C_3$	$r_E = 0$	$\Delta < 0$
35980.f1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
35984.i1	$p = 173$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 135 * 173 + O(173^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
36022.g3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7^3 + O(7^4)$	$C_E = 1$	$ \text{III}_E  = 135$	$C_3$	$r_E = 0$	$\Delta < 0$
36110.b3	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
36110.b3	$p = 157$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 123 * 157 + O(157^2)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$

36127.b1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
36127.b1	$p = 397$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 377 * 397 + O(397^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
36205.b1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 13^3 + O(13^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
36205.b1	$p = 557$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 491 * 557 + O(557^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
36218.e3	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
36218.e3	$p = 199$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 31 * 199 + O(199^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
36365.e3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
36365.e3	$p = 1039$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 731 * 1039 + O(1039^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
36522.d1	$p = 2029$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 1267 * 2029 + O(2029^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
36621.e1	$p = 313$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 261 * 313 + O(313^2)$	$C_E = 4$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
36894.s2	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
36894.s2	$p = 43$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 29 * 43 + O(43^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
37020.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
37095.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$
37355.c2	$p = 31$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 14 * 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
37355.c2	$p = 241$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 222 * 241 + O(241^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
37480.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 0$	$\Delta > 0$
38048.b1	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 18 * 29^2 + O(29^3)$	$C_E = 4$	$ \text{III}_E  = 8$	$C_4$	$r_E = 0$	$\Delta > 0$
38048.a2	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 11 * 29^2 + O(29^3)$	$C_E = 1$	$ \text{III}_E  = 32$	$C_4$	$r_E = 0$	$\Delta > 0$
38165.b1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5 * 17^4 + O(17^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$
38358.d1	$p = 2131$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 207 * 2131 + O(2131^2)$	$C_E = 1$	$ \text{III}_E  = 90$	$C_3$	$r_E = 0$	$\Delta > 0$
38512.d2	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 16 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
38620.b2	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^7 + O(5^8)$	$C_E = 1$	$ \text{III}_E  = 42$	$C_2$	$r_E = 1$	$\Delta > 0$
38739.d3	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 34 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
38739.d3	$p = 349$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 334 * 349 + O(349^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$



38934.d1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta < 0$
38934.d1	$p = 103$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 100 * 103 + O(103^2)$	$C_E = 9$	$ \text{III}_E  = 2$	$C_3$	$r_E = 0$	$\Delta < 0$
38934.i2	$p = 103$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 101 * 103 + O(103^2)$	$C_E = 4$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
38997.c1	$p = 619$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 95 * 619 + O(619^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
39036.a2	$p = 3253$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 795 * 3253 + O(3253^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
40064.g1	$p = 313$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 88 * 313 + O(313^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
40064.a1	$p = 313$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 88 * 313 + O(313^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
40188.a1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 11 * 17 + O(17^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
40274.d1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 6 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
40274.d1	$p = 1549$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 823 * 1549 + O(1549^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
40720.g1	$p = 509$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 38 * 509 + O(509^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
40720.j1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^5 + O(5^6)$	$C_E = 1$	$ \text{III}_E  = 10$	$C_2$	$r_E = 1$	$\Delta > 0$
40770.h3	$p = 151$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 77 * 151 + O(151^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
40770.m1	$p = 151$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 48 * 151 + O(151^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta > 0$
40820.d1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 1$	$\Delta > 0$
40880.bc1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
41230.i3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
41230.i3	$p = 31$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 27 * 31^2 + O(31^3)$	$C_E = 1$	$ \text{III}_E  = 36$	$C_3$	$r_E = 0$	$\Delta < 0$
41691.c3	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 9 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
41691.c3	$p = 1069$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 689 * 1069 + O(1069^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
41780.a1	$p = 2089$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 432 * 2089 + O(2089^2)$	$C_E = 1$	$ \text{III}_E  = 3$	$C_2$	$r_E = 1$	$\Delta > 0$
41790.h1	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 3 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
41790.h1	$p = 199$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 130 * 199 + O(199^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
42495.c1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$
42514.a1	$p = 29$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 15 * 29 + O(29^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$

42514.a1	$p = 733$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 182 * 733 + O(733^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
42620.a2	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_2$	$r_E = 1$	$\Delta > 0$
42658.b3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 4$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
42658.b3	$p = 277$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 142 * 277 + O(277^2)$	$C_E = 4$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
42772.e1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 18 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
42822.b3	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 19 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
42895.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^3 + O(5^4)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
42895.a1	$p = 373$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 23 * 373 + O(373^2)$	$C_E = 1$	$ \text{III}_E  = 6$	$C_2$	$r_E = 1$	$\Delta > 0$
43127.e1	$p = 61$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 32 * 61 + O(61^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
43127.e1	$p = 101$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 38 * 101 + O(101^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
43370.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
43435.d3	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 12 * 17 + O(17^2)$	$C_E = 4$	$ \text{III}_E  = 4$	$C_4$	$r_E = 0$	$\Delta > 0$
43435.d3	$p = 73$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 4$	$q_p = 39 * 73 + O(73^2)$	$C_E = 4$	$ \text{III}_E  = 4$	$C_4$	$r_E = 0$	$\Delta > 0$
43570.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
43570.b1	$p = 4357$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3689 * 4357 + O(4357^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
43730.d1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
43730.d1	$p = 4373$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 1038 * 4373 + O(4373^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
43820.b1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
43836.b1	$p = 281$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 257 * 281^2 + O(281^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
44310.i3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 4 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
44585.a1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 22 * 37^2 + O(37^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
44588.a2	$p = 157$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 109 * 157 + O(157^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
44695.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
44695.a1	$p = 1277$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 980 * 1277 + O(1277^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
44720.j1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^4 + O(5^5)$	$C_E = 1$	$ \text{III}_E  = 8$	$C_2$	$r_E = 1$	$\Delta > 0$

50056.a1	$p = 6257$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 886 * 6257 + O(6257^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
50096.b2	$p = 101$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 54 * 101 + O(101^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
50180.b1	$p = 193$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 60 * 193 + O(193^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
50180.d1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
50320.s1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 17 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
50817.b3	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 10 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
50817.b3	$p = 1303$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 292 * 1303 + O(1303^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
51085.b1	$p = 17$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 10 * 17^2 + O(17^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
51092.a1	$p = 241$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 125 * 241 + O(241^2)$	$C_E = 1$	$ \text{III}_E  = 3$	$C_2$	$r_E = 1$	$\Delta > 0$
51170.k2	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
51245.c1	$p = 37$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 15 * 37 + O(37^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
51245.c1	$p = 277$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 182 * 277 + O(277^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
51325.a1	$p = 2053$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 1027 * 2053 + O(2053^2)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 0$	$\Delta > 0$
51338.a3	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
51338.a3	$p = 19$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 19 + O(19^2)$	$C_E = 9$	$ \text{III}_E  = 1$	$C_3$	$r_E = 0$	$\Delta > 0$
51420.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
51855.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
60014.e1	$p = 811$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 298 * 811 + O(811^2)$	$C_E = 4$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
60034.b1	$p = 13$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 8 * 13 + O(13^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
60034.b1	$p = 2309$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 382 * 2309 + O(2309^2)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 0$	$\Delta > 0$
60078.h2	$p = 19$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 13 * 19 + O(19^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
60370.a1	$p = 5$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5 + O(5^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
60370.a1	$p = 6037$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 4027 * 6037 + O(6037^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
60585.g2	$p = 7$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 6 * 7 + O(7^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$
60585.g2	$p = 577$	$R = \mathbb{Z} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 263 * 577 + O(577^2)$	$C_E = 1$	$ \text{III}_E  = 18$	$C_3$	$r_E = 0$	$\Delta < 0$

60620.d1	$p = 433$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 423 * 433 + O(433^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$
60642.k2	$p = 1123$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 663 * 1123 + O(1123^2)$	$C_E = 4$	$ \text{III}_E  = 45$	$C_3$	$r_E = 0$	$\Delta > 0$
60853.a3	$p = 31$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 2 * 31 + O(31^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta > 0$
60940.h1	$p = 277$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 179 * 277^2 + O(277^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
61130.a1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 3 * 5^6 + O(5^7)$	$C_E = 1$	$ \text{III}_E  = 12$	$C_2$	$r_E = 1$	$\Delta > 0$
70115.a2	$p = 379$	$R = \mathbb{Z} \left[ \frac{1}{2} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 133 * 379 + O(379^2)$	$C_E = 1$	$ \text{III}_E  = 9$	$C_3$	$r_E = 0$	$\Delta < 0$
70448.k1	$p = 17$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 12 * 17^2 + O(17^3)$	$C_E = 1$	$ \text{III}_E  = 16$	$C_2$	$r_E = 0$	$\Delta > 0$
70570.c1	$p = 5$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 2 * 5^2 + O(5^3)$	$C_E = 1$	$ \text{III}_E  = 4$	$C_2$	$r_E = 1$	$\Delta > 0$
80010.o1	$p = 7$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 3$	$q_p = 5 * 7^3 + O(7^4)$	$C_E = 9$	$ \text{III}_E  = 3$	$C_3$	$r_E = 0$	$\Delta > 0$
90064.e1	$p = 433$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 49 * 433 + O(433^2)$	$C_E = 1$	$ \text{III}_E  = 1$	$C_2$	$r_E = 1$	$\Delta > 0$
90116.a1	$p = 1733$	$R = \mathbb{Z} \left[ \frac{1}{1} \right]$	$ E(\mathbb{Q})_{\text{Tor}}  = 2$	$q_p = 540 * 1733 + O(1733^2)$	$C_E = 1$	$ \text{III}_E  = 2$	$C_2$	$r_E = 1$	$\Delta > 0$