

Table 18.1. Table for Obtaining Periods for Invariants g_2 and g_3 ($\bar{g}_2 = g_2 g_3^{-2/3}$). Page 673

Non-Negative Discriminant ($3 \leq \bar{g}_2 \leq \infty$)

$$\omega g_3^{1/6}, \frac{\omega' g_3^{1/6}}{i} + \frac{\sqrt{6}}{12} \ln(\bar{g}_2 - 3); \bar{g}_2 = 3(.05)3.4, 7D$$

$$\omega g_3^{1/6}, \omega' g_3^{1/6}/i; \bar{g}_2 = 3.4(.1)5(.2)10, 7D$$

$$\omega g_3^{1/6} \bar{g}_2^{1/4}, \omega' g_3^{1/6} \bar{g}_2^{1/4}/i; \bar{g}_2^{-1} = .1(-.01)0, 7D$$

Non-Positive Discriminant ($-\infty \leq \bar{g}_2 \leq 3$)

$$\omega_2 g_3^{1/6} |\bar{g}_2|^{1/4}, \omega_2' g_3^{1/6} |\bar{g}_2|^{1/4}/i; \bar{g}_2^{-1} = 0(-.01)-.2, 7D$$

$$\omega_2 g_3^{1/6}, \omega_2' g_3^{1/6}/i; \bar{g}_2^{-1} = -.2(-.05)-1, 7D$$

$$\omega_2 g_3^{1/6}, \frac{\omega_2'}{i} g_3^{1/6} + \frac{\sqrt{6}}{6} \ln(3 - \bar{g}_2); \bar{g}_2 = -1(.2)3, 7D$$

Table 18.2. Table for Obtaining \mathcal{P} , \mathcal{P}' and ζ on $0x$ and $0y$ (Unit Real Half-Period—Period Ratio a). Page 674

Positive Discriminant ($0 \leq x \leq 1, 0 \leq y \leq a$)

$$z^2 \mathcal{P}(z), z^3 \mathcal{P}'(z), z\zeta(z), a = 1, 1.05, 1.1, 1.2, 1.4, 2, 4$$

$$x = 0(.05)1, y = 0(.05) 1.1, 1.2 (.2) a, 6-8D$$

Negative Discriminant ($0 \leq x \leq 1, 0 \leq y \leq a/2$)

$$z^2 \mathcal{P}(z), z^3 \mathcal{P}'(z), z\zeta(z), a = 1, 1.05, 1.15, 1.3, 1.5, 2, 4$$

$$x = 0(.05)1, y = 0(.05)1 (.1)b(b \geq a/2), 7D$$

Table 18.3. Invariants and Values at Half-Periods ($1 \leq a \leq \infty$) (Unit Real Half-Period). Page 680

$$a = 1(.02)1.6(.05)2.3(.1) 4, \infty, 6-8D$$

Non-Negative Discriminant

$$g_2, g_3, e_1 = \mathcal{P}(1), e_3 = \mathcal{P}(\omega'), \eta = \zeta(1), \eta'/i = \zeta(\omega')/i, \sigma(1), \sigma(\omega')/i, \sigma(\omega_2)$$

Non-Positive Discriminant

$$g_2, g_3, e_1, \eta_2 = \zeta(1), \eta_2'/i = \zeta(\omega_2')/i, \sigma(1), \sigma(\omega_2')/i, \sigma(\omega')$$

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