

$$\text{Jacobi } {}^\tau\Theta = \sum_n^{\mathbb{Z}} {}^{\pi i \tau}_n \mathfrak{e}_n$$

$${}^{-\tau^{-1}}\Theta = (-\tau i)^{1/2} {}^\tau\Theta$$

$$\begin{aligned}\text{Eisenstein } {}^\tau E^k &= \sum_{m \wedge n = 1} \overbrace{\tau m + n}^{-k} \\ {}^\tau G^k &= \sum_{m:n \neq 0:0} \frac{1}{(m + \tau n)^k}\end{aligned}$$

$$(a\tau+b)(c\tau+d) {}^{\tau^{-1}}G^k = {}^\tau G^k (c\tau+d)^k$$

$${}^\tau E^k = 2\zeta_k \left(1 - \frac{2k}{B_k} \sum_{n \geqslant 1} {}^{2\pi i \tau} \mathfrak{e}^n \sigma_n^{k-1} \right)$$

$$\text{Ramanujan } {}^\tau \Delta = {}^{2\pi i \tau} \mathfrak{e} \prod_{n \geqslant 1} \overbrace{1 - {}^{2\pi i t} \mathfrak{e}^n}^{24} = \left(60E^4 \right)^3 - 27 \left(140E^6 \right)^2$$

$$(a\tau+b)(c\tau+d) {}^\tau \Delta = {}^\tau \Delta (c\tau+d)^{12}$$

$${}^\tau \Delta = (2\pi)^{12} \sum_{n \geqslant 1} {}^{2\pi i \tau} \mathfrak{e}^n {}_n^\sharp \Delta$$