

$$\int_{\mathcal{F}} d\mu \, \Gamma_{(1,1)}(R) \, j(\tau) = R \int_{\mathcal{F}} j(\tau) + 2R \sum_{N \geq 1} \int_0^{\infty} \frac{d\tau_2}{\tau_2^2} \, e^{-\frac{\pi (NR)^2}{\tau_2}} \, j_0(\tau_2)$$