

$$\text{eqn} := 1000 \cdot \exp(.06 \cdot t) = 1100 \cdot \left(1 + \frac{.06}{360}\right)^{(360 \cdot t)}$$
$$1000 e^{0.06t} = 1100 1.000166667^{360t} \tag{1}$$

$$\text{solve}(\text{eqn}, t)$$
$$19532.91793 \tag{2}$$