

Correct. Starting with  $r = 0.054$  and  $m = 6$ , you can find out when:

$$2P = P\left(1 + \frac{0.054}{6}\right)^{6t} \text{ or } 2P = P(1.009)^{6t} \text{ or } 2 = (1.009)^{6t}$$

Take logarithms of both sides:  $\ln 2 = \ln (1.009)^{6t}$

Use the power property of logarithms to simplify:  $\ln 2 = 6t \cdot \ln (1.009)$

Solve for  $t$  and use a calculator to evaluate:  $t = \frac{\ln 2}{6 \cdot \ln (1.009)} \approx 13 \text{ years}$