

# Section 10.1 Solutions

#35  $\frac{A}{P} = 2$   $A = Pe^{rt}$   $r = 4\%$   $t = ?$

$$\frac{A}{P} = e^{rt}$$

$$\ln\left(\frac{A}{P}\right) = \ln(e^{rt}) = rt$$

$$t = \frac{1}{r} \ln\left(\frac{A}{P}\right) = \frac{1}{.04} \ln 2$$

$$t \approx 17.33 \text{ yrs}$$