

$$3.) \left(1 + \frac{0.0718}{12} \right)^{12} - 1 = 0.074210584$$

$$= 7.42\%$$

4.)

$$2P = P \times \left(1 + \frac{0.12}{4} \right)^{4Y}$$

$$2 = 1.03^{4Y}$$

$$\log(2) = 4Y \log(1.03)$$

$$\text{so } Y = \frac{\log(2)}{4 \log(1.03)}$$