Assignment #5

HW #5 6.2 p 449 # 2, 6, 8, 10, 12

2. 12% compounded monthly for 3 years.
   a. Annual interest rate is 12%.
   b. Length of investment is 3 years.
   c. Periodic interest rate is \( \frac{12}{12} = 1\% \).
   d. Number of periods is \( 12 \cdot 3 = 36 \).

6. \( S = 5000 \left( 1 + \frac{0.10}{1} \right)^{1(3)} = 6655 \)
   \( I = S - P = 6655 - 5000 = \$1655 \)

8. \( S = 8600 \left( 1 + \frac{0.10}{2} \right)^{2(3)} = \$18,772.72 \)

10. \( S = 6300 \left( 1 + \frac{0.12}{12} \right)^{12(3)} = 9013.84 \)
    \( I = S - P = 9013.84 - 6300 = \$2713.84 \)

12. \( S = 3500 \left( 1 + \frac{0.08}{4} \right)^{4(3)} = \$5629.53 \)