

Some useful formulas:

$$A = P \left[\frac{(1+i)^m - 1}{i} \right]$$

$$V = P \left[\frac{1 - (1+i)^{-m}}{i} \right]$$

(1) [3] Determine the amount of the annuity after 60 monthly deposits of \$100 if interest is 4% compounded monthly. (Round your answer to two decimal places.)

(2) [5] A person has a goal of saving \$400,000 over the next 35 years. Equal deposits will be made at the end of each month into a retirement savings fund paying interest at 6% compounded monthly. How large must the monthly deposits be to reach the goal? (Round your answer to two decimal places.)

(3) [7] John is 45 years old and wants to retire at 65. He plans to make monthly deposits in an account paying 4% compounded monthly so that when he retires he can withdraw \$300 a month for 30 years. (All deposits and payments are made at month-end.) How much should John deposit each month?