

Some useful formulas:

$$A = P \left(1 + \frac{r}{n}\right)^{nt}$$

$$A = P(1 + rt)$$

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

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

(1) [5] What rate of interest compounded annually is required to double an investment in 3 years?

(2) [10] Pam and Tim decide to start saving money for their daughter's college education. They open a college savings plan with a \$700 initial investment and next month start to make monthly deposits of \$60. If the account pays 5.00% compounded monthly, how much will the account be worth after 180 deposits? Be sure to include the initial investment in the computation.