

Present Value

Present Value: . The current worth of a sum of money

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

PV = Present Value (what the money is currently worth)

A = Amount of money , or future value of the money needed

r = The interest rate per year (decimal form)

n = number of times that the interest is compounded per year

t = the number of years the money is invested or borrowed

$$A = 5000 \quad (1) \quad PV = A \left(1 + \frac{r}{n}\right)^{-nt}$$

$$r = 0.12$$

$$n = 12$$

$$t = 3$$

$$PV = 5000 \left(1 + \frac{0.12}{12}\right)^{-(12)(3)}$$

$$PV = 5000 (1.01)^{-36}$$

$$PV = 5000 (0.6989)$$

$$PV = \$3494.50$$

$$A = 5000$$

$$r = 0.065$$

$$n =$$


$$t = 4$$

☆ For #5, $\boxed{n}$ is the only part of the formula that changes