Our payment per year is A. In this case A=CV because we have only one source of income.

Then

$$A = CV = P * e^{rt}$$

$$P = A * e^{-rt}$$

$$P = 1000 * e^{0.04t} * e^{-0.12t} = 1000 * e^{-0.08t}$$

If t =1

$$P = 1000 * 2,718^{-0,08} = 923,124$$

Answer:

$$P = 1000 * e^{-0.08t}$$

If t =1

$$P = 923, 124$$