

## The Regular Payment of an Annuity

Some financial experts suggest that a comfortable retirement requires savings of \$1 000 000.

What monthly payment would you have to make at ages 20, 30 or 40 to accumulate a \$1 000 000 retirement fund at age 65?

Assume that the fund earns 9% per year compounded monthly.

Age 20	Age 30	Age 40
A =	A =	A =
r =	r =	r =
i =	i =	i =
N =	N =	N =
n =	n =	n =
PV =	PV =	PV =
R =	R =	R =

Example 2: Suppose you have \$1 000 000 saved in a retirement fund. What regular withdrawal can you make from the fund at the end of each year for 25 years if the fund earns 8% per year compounded annually?

A =

r =

i =

N =

n =

PV =

R =

Example 2: Sheri borrows \$9500 to buy a car. She can repay her loan in 2 ways. The interest is compounded monthly.

- Option A: 36 monthly payments at 6.9% per year
- Option B: 60 monthly payments at 8.9% per year

a) What is Sheri's monthly payment under each option?

Option A

N =

I% =

PV =

PMT =

FV =

P/Y =

C/Y =

PMT :

Option B

N =

I% =

PV =

PMT =

FV =

P/Y =

C/Y =

PMT :

b) How much interest does Sheri pay under each option?

c) Give a reason why Sheri might choose each option?

Homework: Pg. 430: #3 - 6, 8, 10, 11, 13