

Summary of Chapter 1

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12:54 PM

Simple Interest

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

↑ # of years
↑ interest rate, in decimal form
↑ principal
↑ future value

Note: with simple interest it does not matter how many times a year they pay you.

$$\text{annual interest} = \$30 \leftarrow 1 \text{ payment a year}$$

or
\$2.50 per month
($\$2.50 \times 12 = \30)

$$\text{Interest earned} = A - P$$

$$\text{Rate of return} = \frac{A - P}{P} = 0.023 \rightarrow 2.3\%$$

$$\frac{A}{P} = 1.023 \rightarrow 2.3\%$$

Compound Interest

get interest on the interest
t.n

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

A → future value
 P → principal you invested
 $\frac{i}{n}$ → # of compounding periods per year
 nt → # of years

i = interest in decimal form

Compounding period	n Value
quarterly	4
annual	1
semi annually	2
monthly	12
daily	365
weekly	52

interest is 3.2%

$$i = 0.032$$

interest is 15%

$$i = 0.15$$

Rule of 72

$$\frac{72}{\text{interest rate}} = \text{amount years until investment doubles}$$

$$8\% \rightarrow \frac{72}{8} = 9 \text{ years until doubles}$$

Portfolio

- a few investments all for 1 person
- treat each separately and then add together.

Review Practice

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