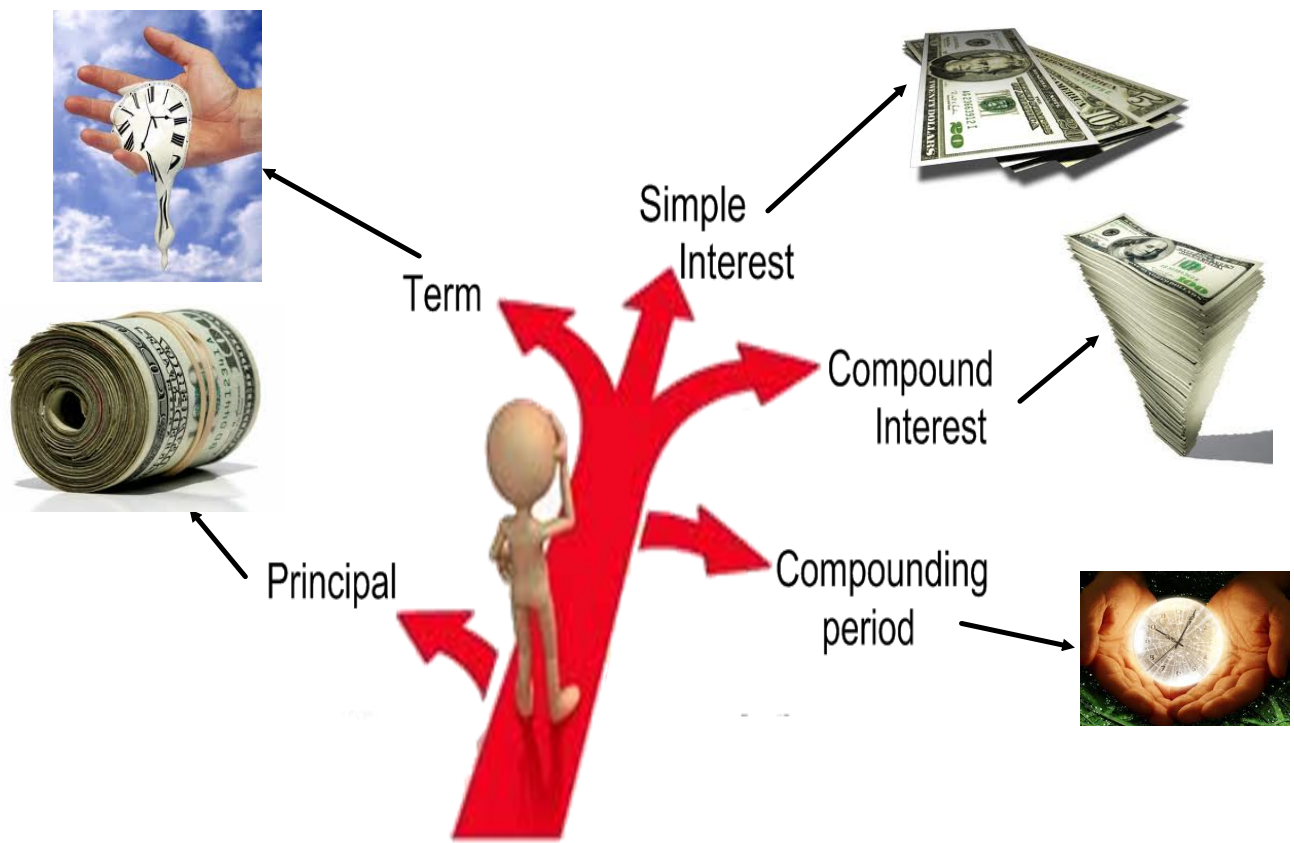


Simple and Compound Interest



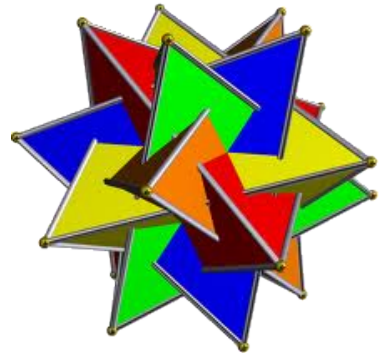


SIMPLE



Interest

COMPOUND



Simple Interest - Interest calculated as a percentage of the principal.

Compound Interest - the interest paid on the principal plus interest

Terminology Tango

daily
semi-annually
monthly
quartly



twice a year
four times a year
365 times a year
twelve times a year

[Click on the picture to verify the match.](#)

SIMPLE Interest



Interest = Principal x rate x time

Handwritten annotations:
- A blue arrow points from the word "Principal" to the word "Principal".
- A blue arrow points from the word "rate" to a handwritten percentage symbol (%).
- A blue arrow points from the word "time" to the word "time".

$$I = Prt$$



Gordon wants to invest \$2000.00.
His bank offers an investment option
that earns **simple interest** at a rate of
1.75% per year.

$$I = Prt$$

$$I = (2000.00)(0.0175)(1)$$

$$I = \$35.00$$



Gordon wants to invest \$2000.00.
His bank offers an investment option
that earns **simple interest** at a rate of
1.75% per year for ~~1~~ 3 years.

$$I = Prt$$

$$I = (2000.00)(0.0175)(\cancel{1})(3)$$

$$I = \$105.00$$

Betty-Ann's bank offers a simple interest rate of 4% per annum. How much interest would Betty-Ann earn on her investment of \$4000 after 8 months.

$$I = Prt$$

$$I = 4000 (0.04) \left(\frac{8}{12}\right)$$

$$I = 4000 (0.04) (0.6\overline{6})$$

$$I = \$106.67$$



Time
in
years!!

Use the simple interest formula to determine answer this question.

The interest earned on a deposit is \$25 with an interest rate of 6% per annum. If the money was invested for 2 years,

$I = 25$ what is the principal?
 $P = ?$
 $r = 6\%$
 $t = 2$

$$I = Prt$$

$$25 = P(0.06)(2)$$

$$\frac{25}{0.12} = \frac{P(\cancel{0.12})}{\cancel{0.12}}$$

$$\$208.33 = P$$

$$P = \$208.33$$

