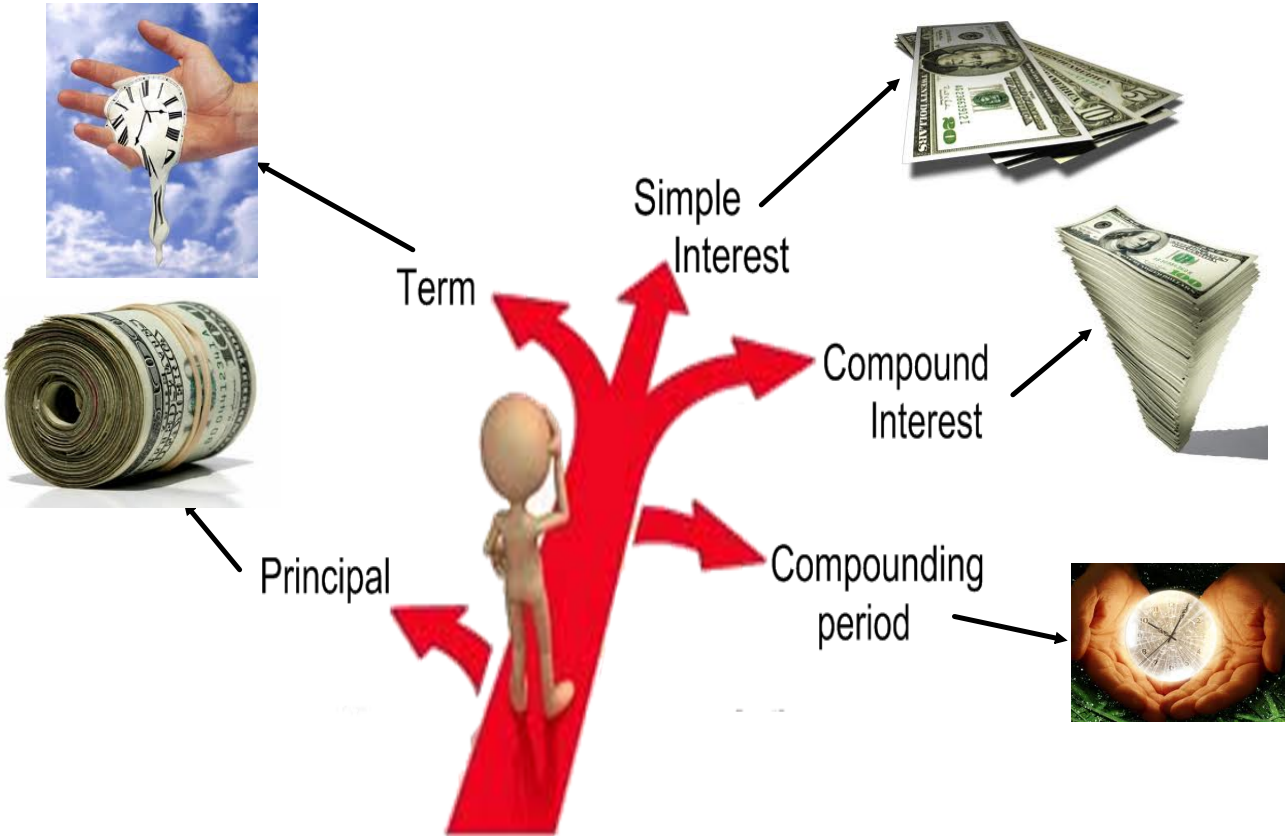


# Simple and Compound Interest



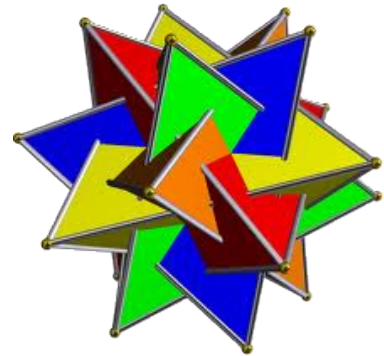


*SIMPLE*



# 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.](#)



Interest = Principal x rate x 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.

$$I = Prt$$

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

$$I = 4000 (0.04) (0.66)$$

$$I = \$106.67$$



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 is 6% per annum. If the money was invested for 2 years, what is the principal?



$$I = Prt$$

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

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

$$\$208.33 = P$$

$$P = \$208.33$$