Simple Interest

Converting interest rate to decimal:
Show the interest rates as they would appear in the formula as r. (Divide by 100, or move decimal 2 spaces to the left)

a) 13%   b) 2.5%   c) 0.5%

Relating Units of Time
Remember that there are 365 days or 52 weeks or 12 months in 1 year.
Express each as a fraction of a year.
  a. 26 weeks   b. 8 months   c. 400 days

- An _____ is an item (real estate, coins, antiques, stocks, etc.) that is purchased with the hope that it will create income in the future.

- A _____ is the act of giving money to someone in exchange for future repayment of the money plus interest.

- _____ is the amount of money earned on an investment or paid for a loan.
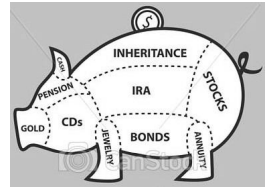
Simple interest is a quick method used to calculate the amount of money earned on an investment or charged on a loan.

SIMPLE INTEREST FORMULA: $I = Prt$ I = interest P = the principal (initial amount of investment/loan) r = the interest rate, in decimal form t = the length of time in years

To determine the total amount of an investment/loan after interest is calculated and included, use: $A = P + I$ A = total amount of investment/loan P = the principal (initial amount of investment/loan) I = interest

Example 1
Calculate the simple interest and final amount of a $675 investment at 7.25% over 2 years.

Example 2

Calculate the interest and final amount of a $750 investment at $4\frac{3}{4}$% over 30 months.

Example 3

Find the principal invested at 5% if after 10 years if it earned $650 in interest.

Example 4

Determine how long $1000 was invested at 6.15% if at the end of the investment $153.75 was earned.

Example 5

What rate of simple interest is needed to get $7000 to grow to $10000 in 5 years?