Simple Interest

Simple interest is the amount of money paid or earned for the use of money.

That amount is determined by the formula:

$$I = Prt$$

I represents the interest, P is the principal which is the amount of money being used, r represents the rate, and t stands for time in years.

Simple interest is interest earned over a specific time period.

Compound interest, which is actually how most money is earned or paid, is broken up during that time period and added to the original amount.

Example Alicia put \$500 into her savings account which pays 3% simple interest per year, how much will she earn in 4 years.

Using $I = Prt$, $P = \$500$ $r = 3\%$ $t = 4$

$$I = (500)(.03)(4)$$

$$I = \$60.$$

She will have earned \$60 and will now have \$560 in her savings account.

Example Bob borrowed \$600 at a rate of 8% for 6 months, how much interest will he have to pay for use of the money and how much will he have to pay back altogether.

Using the formula - $I = Prt$; $P = 600$ $r = 8\%$ $t = ½$

Remember, t is given in terms of years, 6 months is ½ year

$$I = 600(.08)(1/2) = \$24$$

Bob will have to pay \$24 in interest and repay a total of \$624