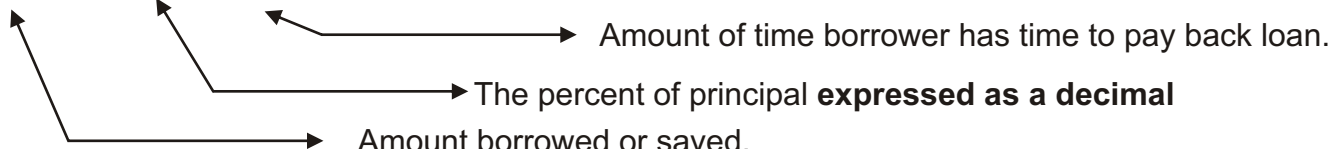


# Interest

Interest - The fee charged by a lender to a borrower for the use of borrowed money.

The formula for finding the simple interest, I is given below:

Interest = Principal x Rate x Time       $I = p \cdot r \cdot t$



↑ Amount of time borrower has time to pay back loan.  
 ↑ The percent of principal **expressed as a decimal**  
 ↑ Amount borrowed or saved.

If the problem states that the interest is calculated yearly, a problem which states the loan or amount borrowed is 4 years, then let  $t = 4$ .

If the problem states that interest is calculated annually and the problem asks to find the interest over 3 months,  $t$  would be expressed as a fraction of a year or  $t = 1/4$  because 3 months is one-quarter of a year.

If the problem states that the interest rate is a monthly rate and NOT annual, one month would be equal to 1 or  $t = 1$ . For 3 months  $t = 3$ .

Directions: For each of the following do NOT calculate the interest. Express what the value of p(principal), r(rate), and t(time) would be for each problem.

1) Borrowing \$3,000 at an annual rate of 5% over a three year period.

P = \_\_\_\_\_  
 R = \_\_\_\_\_  
 T = \_\_\_\_\_

2) \$3,500 in a savings account with an annual interest rate of 1.5% over a period of 2 and 1/2 years.

P = \_\_\_\_\_  
 R = \_\_\_\_\_  
 T = \_\_\_\_\_

3) Borrowing \$500 at a monthly rate of 4% over a 6 month period.

P = \_\_\_\_\_  
 R = \_\_\_\_\_  
 T = \_\_\_\_\_

4) Borrowing \$ 3,400 at an annual rate of 7.5% for a three-month period.

P = \_\_\_\_\_  
 R = \_\_\_\_\_  
 T = \_\_\_\_\_



