Simple Interest Problems

Interest is money paid for the use of money. If you borrow from the bank to buy a car, the bank will charge you interest for its use. If you open a savings account at the bank, the bank will pay you interest for as long as the account is open. **Note:** Banks usually charge compound interest not simple interest. See your local accounting teacher for more information.

The interest (I) is the dollar amount earned or owed.

The interest rate (R) is per year (T) unless otherwise noted. **Note:** If the time is in months, T can be found using the ratio \( \frac{\text{number of months}}{12} \).

The principal (P) is the amount borrowed or deposited.

This is the formula to express simple interest:

\[
I(\text{nterest}) = P(\text{rincipal}) \times R(\text{ate}) \times T(\text{ime})
\]

\[
I = P \times R \times T \text{ or } I = PRT
\]

Solve each of these interest problems:

1) You get a student loan from the New Mexico Educational Assistance Foundation to pay for your educational expenses this year. Find the interest on the loan if you borrowed $2,000 at 8% for 1 year. (You may wish to use the percent key on your calculator or change 8% to .08)

2) You are starting your own small business in Albuquerque. You borrow $10,000 from the bank at a 9% rate for 5 years. Find the interest you will pay on this loan.
3) You are tired at the end of the term and decide to borrow $500 to go on a trip to Whatever Land. You go to the bank and borrow the money at 11% for 2 years.
   a) Find the interest you will pay on the loan.

   b) How much will you have to pay the bank at the end of the two years?

4. a) Find the interest on a loan of $2500 that is borrowed at 9% for 7 months.

   b) How much would it cost to repay the loan from 4a) above?

5. Do you understand what interest means? Circle one  YES!  NO!

6. Have you ever borrowed money from a bank or loan office to buy a car, house, or whatever? Circle one  YES!  NO!

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**Answers**
1. $160
2. $4500
3. a) $110
   b) $610
4. a) $131.25
   b) $2631.25
5. Yes = good job
   No = ask your teacher or IT for help
6. Yes = you know it all
   No = go out and buy something big today!