# Simple Interest Word Problems

Please complete the following questions on a separate sheet of paper.

1. If you borrow $675 for six years at a simple interest rate of 10%, how much interest will you pay?

2. How much interest does a principal of $318 earn at a simple interest rate of 9% over one year?

3. You invest $230 for eight years and at the end you have $285.20. What was the simple interest rate?

4. How long would you have to invest $407 at a simple interest rate of 6% to earn $170.94 in interest?

5. How much money would you have to invest to earn $131.60 in interest at simple interest rate of 4% for seven years?

 6. Calculate the total worth of an investment after six months with a principal of $10,000 at a simple interest rate of 3.5%.

7. Determine the simple interest rate applied to a principal over 20 years if the total interest paid equals the borrowed principal.

8. Determine the accumulated values of the following loans.

(a) A $1200 loan for 7 months at 5% simple interest.

(b) An $8000 loan for 4 years at 12.5% simple interest.

 (c) A $500 loan for 99 days at 10% simple interest. (Note: there are 365 days in a year.)

(d) A $750 loan for 15 weeks at 13.25% simple interest. (Note: there are 52 weeks in a year.)

9. Determine the principal value if a savings account holds $3600 after 10 years at 8% simple interest.

10. A loan of $100 is to be repaid with $120 at the end of 10 months. What is the annual simple interest rate?

11. How long will it take $3000 to earn $60 interest at 6% simple interest?

12. Sarah deposits $4,000 at a bank at an interest rate of 4.5% per year. How much interest will she earn at the end of 3 years?

13. Raymond bought a car for $40, 000. He took a $20,000 loan from a bank at an interest rate of 15% per year for a 3-year period. What is the total amount (interest and loan) that he would have to pay the bank at the end of 3 years?

14. Take a look online (using your phone or other device) to see which bank (or other lender) offers the best rate for keeping your money. Look at no fewer than 3 websites. Assume you have 1000$ to save (as many accounts require you to have a minimum amount of money). Also note, many of the interest rates advertised are for “compound” interest. For our purposes you can pretend this is “simple” interest.

Example:

Bank 1:

Interest rate

Minimum balance required