

# Simple Interest

 (pages 478–480)

**Simple interest** is money you pay the bank or lender for the use of money. Similarly, if you deposit money in a savings account, the bank may pay you simple interest for the use of the money.

<b>Simple Interest</b>	The formula for simple interest is $I = prt$ , where $I$ is the <b>interest</b> , $p$ is the <b>principal</b> , or the amount of money invested or borrowed, $r$ is the annual interest <b>rate</b> , and $t$ is the <b>time</b> , in years.
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## EXAMPLES

- A** What interest would you earn on a savings deposit of \$1,200 at 8% interest for six months?

$$I = prt$$

$$I = 1,200 \times 0.08 \times \frac{1}{2} \quad p = \$1,200, r = 8\% \text{ or } 0.08, t = 6 \text{ months or } \frac{1}{2} \text{ year}$$

$$I = 48$$

The interest you would earn is \$48.

- B** How much interest would you pay on a credit card balance of \$2,000 at 15% interest for 1 year?

$$I = prt$$

$$I = 2,000 \times 0.15 \times 1 \quad p = \$2,000, r = 15\% \text{ or } 0.15, t = 1 \text{ year}$$

$$I = 300$$

The interest you would pay is \$300.

### Try These Together

**Find the interest to the nearest cent for each principal, interest rate, and time.**

1. \$420, 9%, 6 months

$$\text{HINT: } p = \$420; r = 0.09; t = \frac{1}{2}$$

2. \$816, 7%, 9 months

HINT: Replace  $p$ ,  $r$ , and  $t$  with the values given.

## PRACTICE

**Find the interest to the nearest cent for each principal, interest rate, and time.**

3. \$3,800, 10%, 1 year

4. \$2,903, 11%, 18 months

5. \$850.30, 3.75%, 1 year

6. \$283.85, 8.5%, 2 years

**Find the interest to the nearest cent on credit cards for each credit card balance, interest rate, and time.**

7. \$844, 9%, 3 years

8. \$3,000, 12%, 3 months

9. \$1,700, 24%, 9 months

10. \$275, 17.5%, 2 years



- 11. Standardized Test Practice** What is the interest on a credit card balance of \$500 over two years if the interest rate is  $10\frac{1}{2}\%$ ?

**A** \$150.00

**B** \$105.00

**C** \$102.00

**D** \$52.50

Answers: 1. \$18.90 2. \$42.84 3. \$380 4. \$479.00 5. \$31.89 6. \$48.25 7. \$227.88 8. \$90 9. \$306 10. \$96.25 11. B