

Lesson 8 Reteach

Financial Literacy

Simple interest is the amount of money paid or earned for the use of money. To find simple interest I , use the formula $I = prt$. Principal p is the amount of money deposited or invested. Rate r is the annual interest rate written as a decimal. Time t is the amount of time the money is invested in years.

Example 1

Find the simple interest earned in a savings account where \$136 is deposited for 2 years if the interest rate is 7.5% per year. ← *PRINCIPAL* *RATE (AS A DECIMAL)*

$$I = prt$$

Formula for simple interest

$$I = 136 \cdot 0.075 \cdot 2$$

Replace p with \$136, r with 0.075, and t with 2.

$$I = 20.40$$

Simplify.

The simple interest earned is \$20.40.

Example 2

Find the simple interest for \$600 invested at 8.5% for 6 months.

$$6 \text{ months} = \frac{6}{12} \text{ or } 0.5 \text{ year}$$

Write the time in years.

$$I = prt$$

Formula for simple interest

$$I = 600 \cdot 0.085 \cdot 0.5$$

$$p = \$600, r = 0.085, t = 0.5$$

$$I = 25.50$$

Simplify.

The simple interest is \$25.50.

Exercises

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

1. \$300, 5%, 2 years

$$\text{PRINCIPAL} = 300$$

$$\text{RATE} = 0.05$$

$$\text{TIME} = 2$$

$$300(0.05) = \$15$$

$$15(2) = \$30$$

5. \$1,665, 6.75%, 3 years

$$\text{PRINCIPAL} = 1,665$$

$$\text{RATE} = 0.0675$$

$$\text{TIME} = 3$$

2. \$650, 8%, 3 years

$$\text{PRINCIPAL} = 650$$

$$\text{RATE} = 0.08$$

$$\text{TIME} = 3$$

$$650(0.08) = 52$$

$$52(3) = 156$$

6. \$2,105, 11%, $1\frac{3}{4}$ years

$$\text{PRINCIPAL} = 2,105$$

$$\text{RATE} = 0.11$$

$$\text{TIME} = 1.75$$

Lesson 8 Skills Practice

Financial Literacy

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

1. \$500, 4%, 2 years

2. \$350, 6.2%, 3 years

5. \$955, 6.75%, $3\frac{1}{4}$ years

6. \$1,540, 8.25%, 2 years

Find the simple interest paid to the nearest cent for each loan, interest rate, and time.

9. \$800, 9%, 4 years

10. \$280, 5.5%, 4 years

13. \$450, 22%, 1 year

14. \$2,180, 7.7%, $2\frac{1}{2}$ years