Percents and Decimals

Lesson 6-1

Writing percents as decimals

- To change a percent to a decimal, simply move the decimal 2 places to the left then remove the percent symbol.
- For example 50% is 0.5, and 22% is 0.22
- 6% would be 0.06 and 145% is 1.45

Study Tip: When moving the decimal, you may need to add one or more zeros in the number.

Write these percents as decimals:

- 16%
- 62.5%
- 120%

Write these percents as decimals:

16%

0.16

- **62.5%**
- 120%

Write these percents as decimals:

16%

0.16

62.5%

0.625

120%

Write these percents as decimals:

16%

62.5%

120%

0.16

0.625

1.2

Writing Decimals as Percents

- To change a decimal to a percent, simply move the decimal 2 places to the right and then add the percent symbol.
- 0.42 is 42% and 0.8 is 80%
- 1.25 is 125%

Study Tip: When moving the decimal, you may need to add one or more zeros in the number.

Write these decimals as percents:

- 0.4
- 0.023
- 1.75

Write these decimals as percents:

0.4

40%

- 0.023
- 1.75

Write these decimals as percents:

• 0.4

0.023

1.75

40%

2.3%

Write these decimals as percents:

• 0.4

0.023

1.75

40%

2.3%

175%

Writing a Percent as a Fraction

- A percent is a ratio that compares a number to 100.
- To change a percent to a fraction, simply put the percent number in the numerator and make the denominator "100."
- Simplify the fraction when necessary.

- 5% is $\frac{5}{100}$.
- 125% is $\frac{125}{100}$.

- 5% is $\frac{5}{100}$. Simplified to $\frac{1}{20}$
- 125% is $\frac{125}{100}$.

- 5% is $\frac{5}{100}$. Simplified to $\frac{1}{20}$
- 125% is $\frac{125}{100}$. Simplified to $\frac{5}{4}$

- Write as a fraction in simplest form.
- **58%**

7%

• 144%

- Write as a fraction in simplest form.
- **58%**

29 50

7%

144%

- Write as a fraction in simplest form.
- **58%**

 $\frac{29}{50}$

7%

7 100

• 144%

- Write as a fraction in simplest form.
- **58%**

$$\frac{29}{50}$$

7%

$$\frac{7}{100}$$

• 144%

$$\frac{36}{25}$$
, $1\frac{11}{25}$

Writing a Fraction as a Percent

- First, we change the fraction to a decimal by dividing the numerator by the denominator.
- Then we move the decimal 2 spaces to the right and add the percent symbol.

$$\frac{4}{5} =$$

$$\frac{21}{25} =$$

$$\frac{4}{5} = 4 \div 5 = 0.8 = 80\%$$

$$\frac{21}{25} =$$

$$\frac{4}{5} = 4 \div 5 = 0.8 = 80\%$$

- Write each fraction as a percent.
- $\frac{7}{35} =$
- $\frac{3}{5} =$

Write each fraction as a percent.

$$\frac{7}{35} = 7 \div 35 = 0.2 = 20\%$$

$$\frac{3}{5} =$$

Write each fraction as a percent.

$$\frac{7}{35} = 7 \div 35 = 0.2 = 20\%$$

$$\frac{3}{5}$$
 = $3 \div 5 = 0.6 = 60\%$