## 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.

## On Your Own

Write these percents as decimals:

16\%
62.5\%

120\%

## On Your Own

Write these percents as decimals:

16\%
0.16
62.5\%

120\%

## On Your Own

Write these percents as decimals:

16\%
62.5\%

120\%
0.16
0.625

## On Your Own

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.

## On Your Own

Write these decimals as percents:
0.4
0.023
1.75

## On Your Own

Write these decimals as percents:
0.4

40\%
0.023
1.75

## On Your Own

Write these decimals as percents:
0.4
0.023
1.75

40\%
2.3\%

## On Your Own

 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.


## Examples

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

## Examples

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

## Examples

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

## On Your Own

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

7\%

144\%

## On Your Own

- Write as a fraction in simplest form.
- $58 \%$ $\frac{29}{50}$

7\%

144\%

## On Your Own

- Write as a fraction in simplest form.
- $58 \%$
$\frac{29}{50}$
7\%
$\frac{7}{100}$

144\%

## On Your Own

- 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.

## Examples

$\frac{4}{5}=$
$\frac{21}{25}=$

## Examples

- $\frac{4}{5}=4 \div 5=0.8=80 \%$
$\frac{21}{25}=$


## Examples

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

$$
\frac{21}{25}=\quad 21 \div 25=0.84=84 \%
$$

## On Your Own

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


## On Your Own

Write each fraction as a percent.

$$
\begin{aligned}
& \frac{7}{35}=7 \div 35=0.2=20 \% \\
& \frac{3}{5}=
\end{aligned}
$$

## On Your Own

Write each fraction as a percent.

$$
\begin{aligned}
& \frac{7}{35}=7 \div 35=0.2=20 \% \\
& \frac{3}{5}=3 \div 5=0.6=60 \%
\end{aligned}
$$

