

# Lesson 6-3 (pp. 301–304)

## Percents Greater Than 100 or Less Than 1

<b>Lesson Objective</b> <b>1</b> Use percents greater than 100 or less than 1	<b>NAEP 2005 Strand:</b> Number Properties and Operations <b>Topic:</b> Ratios and Proportional Reasoning <b>Local Standards:</b> _____
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### Examples

- 1 Rewriting Percents Greater Than 100** Write 140% as a decimal and as a fraction in simplest form.

$$\begin{aligned}
 140\% &= \boxed{\phantom{000}} && \leftarrow \text{To write as a decimal, move the decimal point } \boxed{\phantom{00}} \text{ places to the } \boxed{\phantom{00}}. \\
 140\% &= \frac{140}{\boxed{\phantom{000}}} && \leftarrow \text{To write as a fraction, use the definition of percent.} \\
 &= \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} \text{ or } \boxed{\phantom{00}} \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} && \leftarrow \text{Simplify the fraction.}
 \end{aligned}$$

140% equals  $\boxed{\phantom{000}}$  in decimal form and  $\boxed{\phantom{000}}$  in fraction form.

- 2 Rewriting Percents Less Than 1** Write 0.75% as a decimal and as a fraction in simplest form.

$$\begin{aligned}
 0.75\% &= \boxed{\phantom{000}} && \leftarrow \text{To write as a decimal, move the decimal point } \boxed{\phantom{00}} \text{ places to the } \boxed{\phantom{00}}. \\
 0.75\% &= \frac{0.75}{\boxed{\phantom{000}}} && \leftarrow \text{To write as a fraction, use the definition of percent.} \\
 &= \frac{0.75 \cdot \boxed{\phantom{000}}}{100 \cdot \boxed{\phantom{000}}} && \leftarrow \text{Multiply numerator and denominator by } \boxed{\phantom{000}}. \\
 &= \frac{\boxed{\phantom{000}}}{10,000} && \leftarrow \text{Simplify as a fraction with a whole number numerator.} \\
 &= \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}} && \leftarrow \text{Simplify.}
 \end{aligned}$$

0.75% equals  $\boxed{\phantom{000}}$  in decimal form and  $\boxed{\phantom{000}}$  in fraction form.

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**③ Writing Fractions and Decimals as Percents** Write each number as a percent. When necessary, round to the nearest hundredth of a percent.

**a.**  $4\frac{2}{3}$

$4\frac{2}{3} =$         ← Use a calculator.

$\approx 4.66, 67\% =$

← Move the decimal point  places to the .

**b. 2.557**

$2.557 = \boxed{\phantom{000}}\%$   $\leftarrow$  Move the decimal point  $\boxed{\phantom{000}}$  places to the  $\boxed{\phantom{000}}$ .

c.  $\frac{1}{325}$

    ← Use a calculator.

$\approx$   %      ← Write as a percent.

d.  $\frac{6}{875}$

      ← Use a calculator.

$\approx$   %      ← Write as a percent.

## Check Understanding

1. Write 125% as a decimal and as a fraction in simplest form.

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- 2.** Write 0.35% as a decimal and as a fraction in simplest form.

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3. Write each number as a percent. When necessary, round to the nearest hundredth of a percent.

**a.**  $3\frac{5}{12}$

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**b.**  $2\frac{4}{5}$

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**c.** 1.71

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**d. 4.005**

4. Idaho has two members in the U.S. House of Representatives. There are a total of 435 representatives. Find the percent of the representatives that are from Idaho. Round to the nearest hundredth of a percent.

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