

Section 5.5 Notes: Percents

Key Vocabulary

Percent

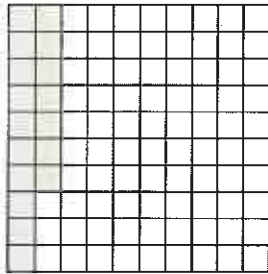
* a percent is a part-to-whole ratio where the whole is 100

(a ratio where the denominator/bottom number is 100)

$$40\% \Rightarrow 40 \text{ out of } 100 \Rightarrow \frac{40}{100}$$

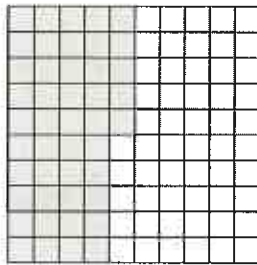
Key Concept: Writing Percents as a Fraction

Ex) Write 17% as a fraction in simplest form.



$$17\% \Rightarrow \frac{17}{100}$$

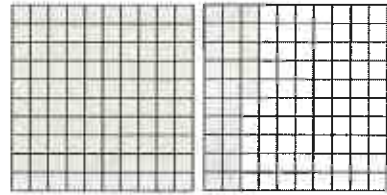
Ex) Write 45% as a fraction in simplest form.



$$45\% \Rightarrow \frac{45}{100} \div 5$$

$$\frac{9}{20}$$

Ex) Write 125% as a fraction or mixed number in simplest form.



$$\frac{125}{100} \div 25$$

$$\frac{5}{4} \text{ or } 1\frac{1}{4}$$

You Try:

1) Write 64% as a fraction in simplest form.

$$64\% \Rightarrow \frac{64}{100} \div 4$$

$$\frac{16}{25}$$

2) Write 168% as a fraction or mixed number in simplest form.

$$168\% \Rightarrow \frac{168}{100} \div 4$$

$$\frac{42}{25} \text{ or } 1\frac{17}{25}$$

Key Concept: Writing Fractions as a Percent

* Rewrite the fraction as an equivalent fraction with a denominator (bottom number) of 100, then write the numerator with the percent symbol (%)

Ex 1) Write $\frac{8}{25}$ as a percent.

$$\frac{8}{25} \xrightarrow{\times 4} \frac{32}{100}$$

32%

Ex 2) Write $\frac{37}{50}$ as a percent.

$$\frac{37}{50} \xrightarrow{\times 2} \frac{74}{100}$$

74%

You Try:

1) Write $\frac{7}{10}$ as a percent.

$$\frac{7}{10} \xrightarrow{\times 10} \frac{70}{100}$$

70%

2) Write $1\frac{3}{4}$ as a percent.

$1\frac{3}{4}$ can be written as $\frac{7}{4}$

$$\frac{7}{4} \xrightarrow{\times 25} \frac{175}{100}$$

$$\begin{array}{r} 3 \\ \times 25 \\ \hline 175 \end{array}$$

175%