

**Do Now:**

Do Not Copy

There are 250 students that attended the basketball game. Of those students, 32% are in the seventh grade. How many students were not in the seventh grade?

68% are not in 7<sup>th</sup> grade

$$\frac{x}{250} = \frac{32}{100} \quad x = 80 \text{ 7}^{\text{th}} \text{ graders}$$

170 are not 7<sup>th</sup> graders

$$\frac{x}{250} = \frac{68}{100} \quad x = 170$$

**7.4 Fractions, Decimals, and Percents**

7.RP  
7.NS

- SWBAT rewrite fractions, decimals, and percents.
- SWBAT understand numbers and their relationships.

Calculators: No

To write a percent as a decimal, divide the percent by 100. (same as moving the decimal two places to the left)

$$4\% = \frac{4}{100} = 0.04$$

Percent → Decimal



Divide by 100



Move decimal two places

Ex)  $25\% = \frac{25}{100} = 0.25$

$$7\% = \frac{7}{100} = 0.07$$

To write a decimal as a percent, multiply the decimal by 100. (same as moving the decimal two places to the right)

$$0.76 \rightarrow 0.76(100) = 76\%$$

$$0.76 \rightarrow 0.76 \cdot 100 = 76\%$$

Multiply by 100

Move the decimal two places



ex)  $0.636 = 0.636 \cdot 100 = 63.6\%$

$$1.1511 = 1.1511 \cdot 100 = 115.11\%$$

You try.

Write the percent as a decimal.

- 150%  $1.50$
- 39.8%  $.398$

Write the decimal as a percent.

- 2.7  $270\%$
- 0.007  $0.7\%$

To write a percent as a fraction:

- remove percent sign
- put number over 100
- reduce if possible

ex)  $17\% = \frac{17}{100}$

ex)  $120\% = \frac{120}{100} = \frac{6}{5} = 1\frac{1}{5}$

You try.

Write the percent as a fraction.

- $0.32\%$   $\frac{0.32}{100} = \frac{32}{10,000} = \frac{8}{2500}$
- $2.5\%$   $\frac{2.5}{100} = \frac{25}{1,000} = \frac{5}{200} = \frac{1}{40}$

To write a fraction as a percent:

this side is a fraction:  $\text{Fraction} = \frac{\text{part}}{\text{whole}}$   
 this is the percent:  $\frac{\%}{100}$  ← always variable

ex)  $4/5$

$$\frac{4}{5} = \frac{x}{100}$$

$$5(x) = 4(100)$$

$$5x = 400$$

$$x = 80$$

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

ex)  $27/50$

$$\frac{27}{50} = \frac{x}{100}$$

$$50(x) = 27(100)$$

$$50x = 2700$$

$$x = 54$$

$$\frac{27}{50} = 54\%$$

multiply by 100

$$\frac{31}{37} = 0.8378378 = 83.78\%$$

$$= 84\%$$

$$\frac{31}{37} = \frac{x}{100} \quad x = 83.78\%$$

You try.

Write the fraction as a percent.

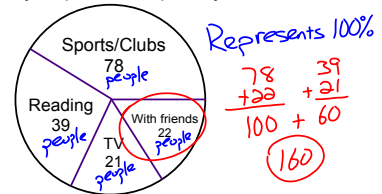
- $1/20$
- $3/8$

A **circle graph** represents data as parts of a circle, with each part labeled with its fractions or equivalent percent.

Pie Chart  
Pie Graph

**Exit Pass 7.4**

How do you prefer to spend your time?



What percent of students prefer to spend time with friends?

Total Surveyed: 160 people

$$\frac{22}{160} = \frac{x}{100}$$

$$\frac{180x}{160} = \frac{2200}{160}$$

$$x = 13.75$$

13.75% of students

**Exit Pass 7.4**

How do you write a percent as a fraction?

"Don't blame the sea if you cannot catch a fish."

Working individually or with a partner, complete the workbook.

Workbook pg.

**Reflection of Today's Lesson****7.4 Fractions, Decimals, and Percents**

7.RP  
7.NS

- SWBAT rewrite fractions, decimals, and percents.
- SWBAT understand numbers and their relationships.

Calculators: No

**Homework**

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