

Bellringer: December 7, 2015

REMEMBER WHAT IT LOOKS LIKE TO BE "READY TO LEARN":

- Put your bag under your desk.
- Sharpen your pencils(no pens).
- Write down your homework.
- Update your Table of Contents.
- Pick up your paper(s) for today.

DMF:

- Complete the Opening Exercise on page 1 in your notes section.
- Discuss your answers with a partner.
- Be prepared to discuss as a class in 5 minutes.

OUTCOMES:

- I can convert between fractions, decimals, and percents, including percents that are less than 1% and greater than 100%.
- I can explain a process for converting between fractions, decimals, and percents.
- I can communicate effectively with the class by...

Lesson 1: Percent

Classwork

Opening Exercise 1: Matching

Match the percents with the correct sentence clues.

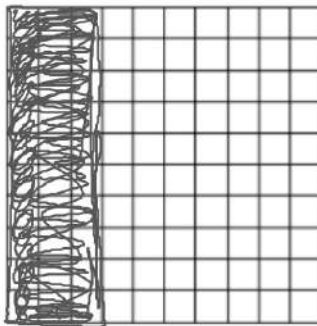
per 100

25%	25%	I am half of a half. 5 cubic inches of water filled in a 20 cubic inch bottle.	$\frac{5}{20} = \frac{1}{4}$
50%	$\frac{1}{2}\%$	I am less than $\frac{1}{100}$. 25 out of 5,000 contestants won a prize.	$\frac{25}{5000} = \frac{1}{200}$
30%	50%	The chance of birthing a boy or a girl. A flip of a coin.	$\frac{1}{2}$
1%	30%	I am less than a half but more than one-fourth. 15 out of 50 play drums in a band.	$\frac{15}{50} = \frac{3}{10}$
10%	100%	I am equal to 1. 35 question out of 35 questions were answered correctly.	$\frac{35}{35} = 1$
100%	300%	I am more than 1. Instead of the \$1,200 expected to be raised, \$3,600 was collected for the school's fundraiser.	$\frac{3600}{1200} = 3$
300%	1%	I am a tenth of a tenth. One penny out of one dollar.	$\frac{1}{100}$
$\frac{1}{2}\%$	10%	I am less than a fourth but more than a hundredth. \$11 out of \$110 earned is saved in the bank.	$\frac{11}{110} = \frac{1}{10}$

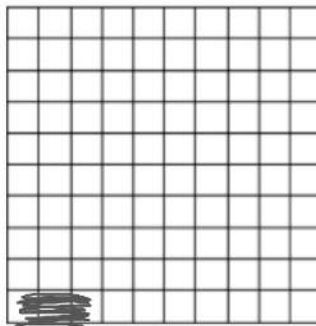
Opening Exercise 2

Color in the grids to represent the following fractions:

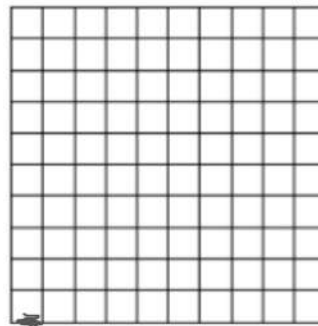
a. $\frac{30}{100} = 30\%$
 $= .30$



b. $\frac{3}{100} = 0.03$
 $= 3\%$



c. $\frac{1}{3} = \frac{1}{3}\%$
 $\frac{1}{3}$



Example 1

Use the definition of the word "percent" to write each percent as a fraction and then a decimal.

per 100 $\frac{x}{100}$

Percent	Fraction	Decimal
37.5%	$\frac{37.5}{100}$	0.375 .375
100%	$\frac{100}{100}$	1
110%	$\frac{110}{100}$	1.1
1%	$\frac{1}{100}$.01
$\frac{1}{2}\%$ = .5%	$\frac{.5}{100}$.005

Example 2

Fill in the chart by converting between a fraction, decimal, and percent. Show your work in the space below.

Fraction	Decimal	Percent
$\frac{350}{100}$	3.5 $\xrightarrow{\times 100}$	350% $\xleftarrow{\div 100}$
$\frac{25}{1000} = \frac{2.5}{100}$	0.025 \rightarrow	2.5%
$\frac{1}{8}$.125	12.5%

$\frac{100 \div 8}{800 \div 8} = \frac{12.5}{100}$
 $\frac{1(12.5)}{8(12.5)} = \frac{12.5}{100}$

Problem Set

4. Fill in the chart by converting between fractions, decimals, and percents. Show work in the space below.

Fraction	Decimal	Percent
		100%
	0.0825	
	6.25	
$\frac{.125}{100}$.00125	$\frac{1}{8}\% = .125\%$
$\frac{2}{300}$		
		33.3%
$\frac{3}{4}$ $\frac{100}{100}$		
		250%
	0.005	
$\frac{150}{100}$		
	0.055	

Problem Set

2. Benjamin believes that $\frac{1}{2}\%$ is equivalent to 50%. Is he correct? Why or why not?