

Warm-Up

8/9/17

1. Rhonda put  $2\frac{3}{4}$  pounds of pecans into a  $\frac{1}{4}$ -pound bag. How many bags did Rhonda fill?

2. Which is greater: The *product* of  $\frac{1}{2}$  and  $\frac{1}{4}$  OR the *sum* of  $\frac{1}{2}$  and  $\frac{1}{4}$ ?

$$1) \quad 2 \frac{3}{4} \div \frac{1}{4}$$

$$\frac{11}{4} \div \frac{1}{4}$$

$$\frac{11}{4} \times \frac{4}{1} = \frac{44}{4} = 11 \text{ bags}$$

Cross Dividing

$$\begin{array}{r}
 1 \\
 \hline
 11 \\
 \hline
 14
 \end{array}
 \times
 \begin{array}{r}
 16.4 \\
 \hline
 11
 \end{array}
 \begin{array}{l}
 \approx 4 \\
 \hline
 1 \\
 = 4
 \end{array}$$

2)

$$\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$$

$$\frac{1}{2} + \frac{1}{4} = \frac{2}{4} + \frac{1}{4} = \frac{3}{4}$$

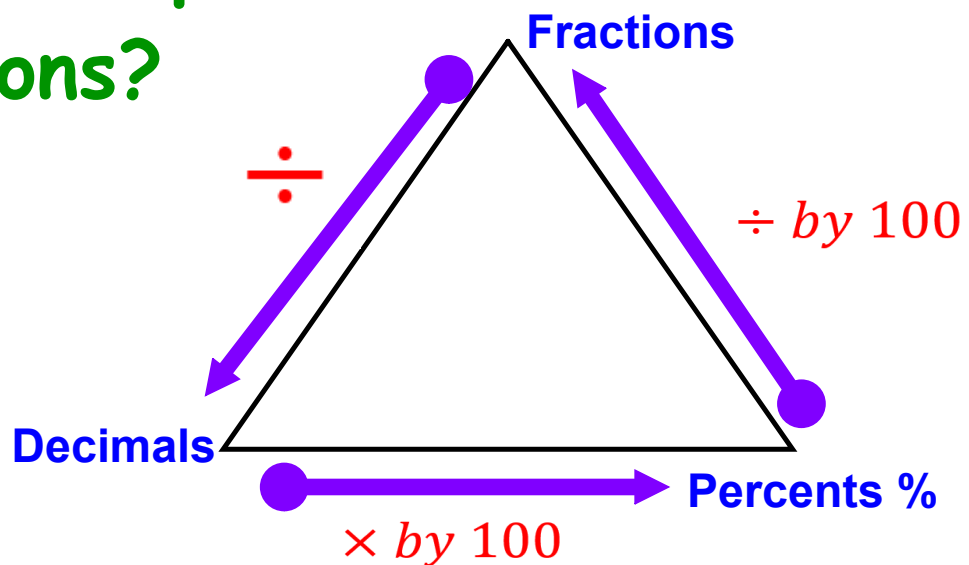
$$2:2, (4)$$

$$4:(4)$$

The sum is  
greater than the  
product.

## Essential Question 8/9/17

How can we convert fractions into decimals, decimals to percents, percents to fractions?



## FRACTION-DECIMAL-PERCENT CONVERSIONS NOTES

Examples:

$$1) \frac{5}{6} = \boxed{0.8\bar{3}} \textcircled{2}$$

$$\begin{array}{r} 6 \overline{) 5.00} \\ \underline{6 \phantom{0} 0} \\ 150 \\ \underline{-48} \\ 200 \\ \underline{-180} \\ 20 \end{array}$$

$$\frac{5}{5} = \frac{8}{8}$$

$$\begin{array}{r} 5 \overline{) 8.0} \\ \underline{5} \\ 30 \\ \underline{-25} \\ 50 \\ \underline{-50} \\ 0 \end{array}$$

$$= \boxed{1.6}$$

To convert a fraction to a decimal:

Divide the numerator by the  
denominator.

Examples:

$$\textcircled{1} \frac{3}{5} \overset{\times 20}{=} \frac{60}{\underset{\rightarrow 20}{5} \cdot 100}$$

$$= 60\%$$

To convert a fraction to a percent:

Use the Percent Proportion

$$\frac{\text{numerator}}{\text{denominator}} = \frac{\text{percent}}{100}$$

**Examples:**

① 0.06

$$\frac{6}{100} \div 2$$

$$\frac{3}{50}$$

$$= \frac{3}{50}$$

② 3.12

$$\frac{312}{100} \div 4$$

$$\frac{78}{25}$$

$$= 3 \frac{3}{25}$$

To convert a *decimal to a fraction*:

Write the number to the right of the decimal as the Numerator and write the Place value of the last digit as the Denominator. Simplify.



**Examples:**

$$\textcircled{1} \ 0.09 = 9\%$$

$$\textcircled{2} \ 1.10 = 110\%$$

To convert a **decimal** to a **percent**:

Move the decimal 2 places (or multiply the decimal by 100) and add the percent symbol after the number.

Examples:

$$\textcircled{1} \quad 45\% \\ = \frac{45 \div 5}{100 \div 5}$$

$$= \boxed{\frac{9}{20}}$$

$$\textcircled{2} \quad 12\% \\ = \frac{12 \div 4}{100 \div 4}$$

$$= \boxed{\frac{3}{25}}$$

To convert a percent to a fraction:

Write the number to the left of the percent sign as the numerator and 100 as the denominator. Simplify.

\* Remember, "percent" means

per hundred.

Examples:

①  $65\%$

$.65$

②  $123\%$

$1.23$

To convert a percent to a decimal:

Move the decimal 2 places left (or divide by 100) and delete the percent symbol. (If the percent does not have a decimal, you can always add one to the right of the number.)

# Class Work

# 8/9/17

Problem	Fraction	Decimal	Percent
1.	$\frac{4}{5}$	0.80	80%
2.	$\frac{375}{1000} = \frac{3}{8}$	0.375	37.5%
3.	$\frac{11}{20}$	.55	55%
4.	$\frac{7}{8}$	.875	87.5%
5.	$\frac{18}{25}$	0.72	72%
6.	$\frac{13}{20}$	.65	65%

7.	$\frac{975}{1000} = \frac{39}{40}$	0.975	97.5%
8.	$\frac{110}{100} = 1\frac{1}{10}$	1.10	110%
9.	$\frac{105}{100}$	1.05	105%
10.	$\frac{46}{10000} = \frac{23}{5000}$	0.0046	.46%
11.	$\frac{112}{100} = 1\frac{3}{25}$	1.12	112%
12.	$\frac{35}{20}$	1.75	175%

