7-2 Fractions, Decimals, and Percents

To write a percent as a decimal - divide by 100 and remove the percent symbol.

To write a decimal as a percent - multiply by 100 and add a percent symbol.

pg. 337 Study Tip - To divide a number by 100, move the decimal point two places to the left.
            To multiply a number by 100, move the decimal point two places to the right.

$$24\% \quad \% \text{ divide by } 100 \quad 24\% = \frac{24}{100} \quad 0.24$$

$$0.05 = \frac{5}{100} = 5\% \quad 0.05$$

a.) $16\% = \frac{16}{100} = 0.16 \qquad 0.16$

b.) $9\% = \frac{9}{100} = 0.09 \qquad 0.09$

1 A. $78\% = \dfrac{78}{100} = 0.78$

1 B. $2\% = \dfrac{2}{100} = 0.02$

$\boxed{\text{Place Value}}$

$0.\ \underset{1}{\overset{\times}{\underline{}}}\ \underset{\frac{1}{10}}{\overset{\times}{\underline{}}}\ \underset{\frac{1}{100}}{\overset{\times}{\underline{}}}\ \underset{\frac{1}{1000}}{\overset{\times}{\underline{}}}$

a.) 0.7%

    $\% = $ divide by 100

$0.007 = 0.007$

$\dfrac{0.7}{100} = .007$

    shortcut
    2 spaces left!

b.) 537% $\dfrac{537}{100}$

$537. = 5.37$

2A.) 126%

$$\frac{126}{100} = \quad 126. = 1.26$$

2B.) 0.9%

$$\frac{0.9}{100} = 00.9 \quad 0.009$$

a.) 0.2×100

$0.20. = 20\%$

b.) $3.84 \times 100 = 3.84. = 384\%$

c.) $0.005 \times 100 = 0.005 \quad 0.5\%$

3A.) 0.01

decimal as a percent × 100 = _____ add % symbol

0.01 $\boxed{1.0\%}$

3B.) 3.91 × 100 = 3.91 = 391 %

3C.) 0.002 × 100 = 0.2 %

$\frac{1}{2} = 0.5$

Fraction

Numerator / denominator

$\frac{1}{2}$

$\div 100$

decimal point
left 2 spaces

0.5   50%

Decimal   Percent

$\times 100$

decimal right
2 spaces
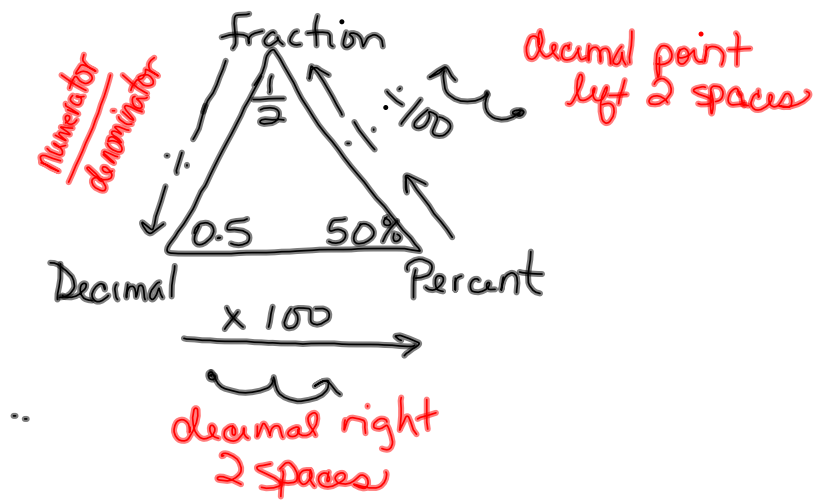
a) $\dfrac{5}{8} = 0.625 = 62.5\%$

b) $\dfrac{7}{9} = 0.7777 = 77.8\%$

c) $\dfrac{27}{13} = 2.0769 = 207.7\%$

d) $\dfrac{3}{400} = 0.0075 = 0.75\%$

4 A. $\dfrac{27}{40} = 67.5\%$

4B. $\dfrac{1}{9} = 11.1\%$

4C. $\dfrac{1}{250} = 0.4\%$

4D. $\dfrac{17}{11} = 154.5\%$

Change all to same format.

$$\frac{1}{5} \qquad 21\% \qquad 0.15 \qquad 0.15$$

$$\frac{1}{5} = \frac{20}{100} = 20\% \qquad \boxed{21\%} \qquad 15\%$$

5.　Fish　　　Ribs　　　Chicken

$\frac{1}{8}$　　　14%　　　0.12

largest?

$\frac{1}{8} = 0.125 = 12.5\%$　　　　0.12 $= 12\%$

(14% largest)

Assignment
   7-2   #10-42
   add # 56, 58, 60