

7th Grade

1.4 Recognize and Generate Equivalent forms of  
Fractions, Decimals, and Percents

Fractions, Decimals, and Percents are all different ways to  
write the same number!

Common ones that you should just know...

$$0.25 = 25\% = \frac{1}{4}$$

$$0.\bar{3} = 33\% = \frac{1}{3}$$

$$0.50 = 50\% = \frac{1}{2}$$

$$0.\bar{6} = 67\% = \frac{2}{3}$$

$$0.75 = 75\% = \frac{3}{4}$$

Foldable - need scissors and glue

**Percents as Decimals**

Write each percent as a decimal.

1) ~~35%~~ .35

2) ~~115%~~ 1.15

3) ~~4%~~ .04

**Decimals as Percents**

Write each decimal as a percent.

4) 0.20 20%

5) 1.66 166%

6) 0.03 3%

Write a Fraction as a Decimal

7) Write  $\frac{5}{8}$  as a decimal.

$$\begin{array}{r} \textcircled{.625} \\ 8 \overline{) 5.000} \\ \underline{48} \phantom{00} \\ 20 \phantom{0} \\ \underline{16} \phantom{0} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

$.121212$   
 $\overline{.12}$

Fractions as Percents

8)  $\frac{3}{8}$

$$\begin{array}{r} .375 \\ 8 \overline{) 3.000} \\ \underline{24} \phantom{00} \\ 60 \phantom{0} \\ \underline{56} \phantom{0} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

$.375$

$37.5\%$   
or  
 $38\%$

9)  $\frac{2}{3}$

$$\begin{array}{r} .66 \\ 3 \overline{) 2.000} \\ \underline{18} \phantom{00} \\ 20 \phantom{0} \\ \underline{18} \phantom{0} \\ 20 \\ \underline{18} \\ 20 \end{array}$$

$.6$

$.6666$

$66.6\%$

or  
 $67\%$

Decimal as a Fraction

10) Write 0.45 as a fraction.

*tenths* ↓ *hundredths* ↓  
 $\frac{45}{100} = \frac{\div 5}{\div 5} = \frac{9}{20}$

put over place value & simplify

11) 0.3

$.30$   
 $\frac{3}{10}$

$\frac{3}{10}$

Percent as a Fraction  
put over 100 & simplify

12) 23%

$\frac{23}{100}$

13) 52%

$\frac{52}{100} = \frac{\div 2}{\div 2} = \frac{26}{50} = \frac{\div 2}{\div 2} = \frac{13}{25}$

You Try: F, D, %

Write the other two forms of each value.

a) 0.32

$$\frac{F}{\frac{32}{100} = \frac{8}{25}}$$

$$\frac{\%}{32\%}$$

b) 36%

$$\frac{D}{.36}$$

$$\frac{F}{\frac{36}{100} = \frac{9}{25}}$$

c) 1/3

$$\frac{D}{3 \overline{) .33333} \\ .3}$$

$$\frac{\%}{33\%}$$

# Homework

# Worksheet