

MARCH 2, 2015 4TH

STARTER

1.

$$\begin{array}{r} 44 \\ 7 \overline{) 308} \\ \underline{28} \\ 28 \\ \underline{28} \\ 0 \end{array}$$

2.

$$\begin{array}{r} 19 \\ 8 \overline{) 152} \\ \underline{8} \\ 72 \\ \underline{72} \\ 0 \end{array}$$

3.

$$\begin{array}{r} 25 \\ 12 \overline{) 300} \\ \underline{24} \\ 60 \\ \underline{60} \\ 0 \end{array}$$

4.

$$\begin{array}{r} 98.75 \\ 4 \overline{) 395.00} \\ \underline{36} \\ 35 \\ \underline{32} \\ 30 \\ \underline{28} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

GALLERY

3/2 Converting between Fractions, Decimals, and Percents

Remember these?

Fractions to Decimals

$$\frac{4}{5} = 0.8$$

$$\begin{array}{r} 5 \overline{) 4.0} \\ \underline{-40} \\ 0 \end{array}$$

$$\frac{3}{8} = 0.375$$

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

bottom $\overline{)$ *top*

$$2\frac{3}{4} = 2.75$$

$$\begin{array}{r} .75 \\ 4 \overline{) 3.00} \\ \underline{-28} \\ 20 \\ \underline{-20} \\ 0 \end{array}$$

Decimals to Fractions

$$0.\underline{42} = \frac{42 \div 2}{100 \div 2} \\ = \frac{21}{50}$$

$$3.14 = 3 \frac{14 \div 2}{100 \div 2} \\ = 3 \frac{7}{50}$$

$$6.125 = 6 \frac{125 \div 5}{1000 \div 5} \\ = 6 \frac{25 \div 5}{200 \div 5} \\ = 6 \frac{5 \div 5}{40 \div 5} \\ = 6 \frac{1}{8}$$

SAY it
WRITE it
SIMPLIFY it

What does percent mean?

out of 100

$$\frac{\#}{100}$$

then reduce

Percent \longrightarrow **fraction**

$$78\% = \frac{78}{100} \div 2$$
$$= \frac{39}{50}$$

$$24\% = \frac{24}{100} \div 4$$
$$= \frac{6}{25}$$

$$120\% = \frac{120}{100} \div 10$$
$$= \frac{12}{10} \div 2$$
$$= \frac{6}{5}$$
$$= 1\frac{1}{5}$$

$$8\% = \frac{8}{100} \div 4$$
$$= \frac{2}{25}$$

$$\begin{array}{r} 5 \overline{)6} \\ \underline{-5} \\ 1 \end{array}$$

Percents \longrightarrow Decimals

$$\underline{45}\% = \frac{45}{100} = 0.45$$

$$\underline{105}\% = 1.05$$

$$\underline{0.8}\% = 0.08$$

$$\underline{37.5}\% = 0.375$$

*Move decimal
two places
to the LEFT*

Decimals \longrightarrow Percents

$$0.\underline{42} = 42\%$$

$$0.\underline{08} = 8\%$$

$$1.\underline{23} = 123\%$$

$$5.\underline{1} = 510\%$$

Move the decimal
two places
to the **RIGHT**

FRACTION → PERCENT

$$\frac{1}{4} = 25\%$$
$$4 \overline{) 1.00}$$
$$\begin{array}{r} .25 \\ -8 \\ \hline 20 \\ -20 \\ \hline 0 \end{array}$$

DIVIDE *bottom*) *top*
THEN MOVE DECIMAL
TWO TO THE RIGHT

$$\frac{2}{5}$$

$$1\frac{3}{8}$$

Fill in the chart. Show your work below.

| Fraction | Percent | Decimal |
|----------------|---------|---------|
| | 36% | |
| $4\frac{5}{8}$ | | |
| | | 3.28 |

HOMEWORK

DUE