

MARCH 2, 2015 ^{5TH} ^{6TH} STARTER

1.

$$\begin{array}{r} 44 \\ 7 \overline{) 308} \\ \underline{-21} \\ 90 \\ \underline{-84} \\ 60 \\ \underline{-56} \\ 40 \\ \underline{-35} \\ 50 \\ \underline{-49} \\ 10 \\ \underline{-7} \\ 30 \\ \underline{-28} \\ 20 \\ \underline{-21} \\ 0 \end{array}$$

2.

$$\begin{array}{r} 19 \\ 8 \overline{) 152} \\ \underline{-8} \\ 70 \\ \underline{-64} \\ 60 \\ \underline{-56} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

3.

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

4.

$$\begin{array}{r} 98\frac{3}{4} \\ 4 \overline{) 395} \\ \underline{-36} \\ 35 \\ \underline{-32} \\ 30 \\ \underline{-28} \\ 20 \\ \underline{-20} \\ 0 \end{array}$$

GALLERY

3/2 Converting between Fractions, Decimals, and Percents

top \div bottom

Remember these?

Fractions to Decimals

$$\boxed{\text{bottom} \overline{) \text{top}}}$$

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

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

$$\frac{5}{8} = 0.625$$

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

$$3\frac{4}{5} = 3.8$$

$$\begin{array}{r} .8 \\ 5 \overline{) 4.0} \\ \underline{-40} \\ 0 \end{array}$$

Decimals to Fractions

$$\begin{aligned} 0.24 &= \frac{24 \div 2}{100 \div 2} \\ &= \frac{12 \div 2}{50 \div 2} \\ &= \frac{6}{25} \end{aligned}$$

$$\begin{aligned} 0.875 &= \frac{875 \div 25}{1000 \div 25} \\ &= \frac{35 \div 5}{40 \div 5} \\ &= \frac{7}{8} \end{aligned}$$

$$\begin{aligned} 2.06 &= 2 \frac{6 \div 2}{100 \div 2} \\ &= 2 \frac{3}{50} \end{aligned}$$

SAY it
WRITE it
SIMPLIFY it

What does percent mean?

out of 100

$\frac{\#}{100}$ <p>then reduce</p>

Percent \longrightarrow **fraction**

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

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

$$120\% = \frac{120 \div 20}{100 \div 20}$$
$$= \frac{6}{5}$$
$$= 1\frac{1}{5}$$

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

Percents \longrightarrow Decimals

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

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

$$\underline{0.8}\% = 0.08 \quad \underline{37.5}\% = 0.375$$

Move decimal
two places
to the LEFT

Decimals \longrightarrow Percents

$$0.42 = 42\%$$

$$0.08 = 8\%$$

$$1.23 = 123\%$$

$$5.10 = 510\%$$

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

FRACTION \longrightarrow PERCENT

$$\frac{1}{4} \cdot \frac{25}{25} = \frac{25}{100} = 25\%$$

$$\frac{2}{5} \cdot \frac{20}{20} = \frac{40}{100} = 40\%$$

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

$$1\frac{3}{8} = 1.375 = 137.5\%$$

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

Fill in the chart. Show your work below.

$$\begin{aligned} & \frac{36 \div 2}{100 \div 2} \\ &= \frac{18 \div 2}{50 \div 2} \\ &= \frac{9}{25} \end{aligned}$$

Fraction	Percent	Decimal
$\frac{9}{25}$	36%	0.36
$4\frac{5}{8}$	46.25%	4.625
$3\frac{7}{25}$	32.8%	3.28

$$\begin{aligned} & \frac{328}{100} \\ &= 3 \frac{28 \div 4}{100 \div 4} \\ &= 3 \frac{7}{25} \end{aligned}$$

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

HOMEWORK

Melon WS!

DUE Tuesday