

MARCH 2, 2015 ^{1ST} _{2ND} STARTER

The number of girls who do wear a watch
is double the number who don't.

The number of boys who don't wear a watch
is double the number who do.

If I tell you the number of girls in the class
is double the number of boys,
can you tell me the number I teach? Here's a clue:
More than 20; below 32!



GALLERY

3/2 Converting between Fractions, Decimals, and Percents

Remember these?

Fractions to Decimals

$$\frac{4 \cdot 2}{5 \cdot 2} = \frac{8}{10} = 0.8$$

$$\frac{3}{8} = 0.375 \quad 8 \overline{) 3.000}$$
$$\begin{array}{r} .375 \\ 8 \overline{) 3.000} \\ \underline{-24} \\ 60 \\ \underline{-56} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

bottom) *top*

$$4 \frac{4}{9} = 4.\overline{4}$$

$$9 \overline{) 4.00}$$
$$\begin{array}{r} .44 \\ 9 \overline{) 4.00} \\ \underline{-36} \\ 40 \\ \underline{-36} \\ 4 \end{array}$$

Decimals to Fractions

$$0.71 = \frac{71}{100}$$

$$0.24 = \frac{24 \div 4}{100 \div 4} \\ = \frac{6}{25}$$

$$3.6 = 3 \frac{6 \div 2}{10 \div 2} \\ = 3 \frac{3}{5}$$

$$7.375 = 7 \frac{375 \div 25}{1000 \div 25} \\ = 7 \frac{15 \div 5}{40 \div 5} \\ = 7 \frac{3}{8}$$

SAY it
WRITE it
SIMPLIFY it

What does percent mean?

out of 100

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

Percent \longrightarrow **fraction**

$$\begin{aligned} 78\% &= \frac{78 \div 2}{100 \div 2} \\ &= \frac{39}{50} \end{aligned}$$

$$\begin{aligned} 24\% &= \frac{24 \div 4}{100 \div 4} \\ &= \frac{6}{25} \end{aligned}$$

$$\begin{aligned} 120\% &= \frac{120 \div 20}{100 \div 20} \\ &= \frac{6}{5} \\ &= 1\frac{1}{5} \end{aligned}$$

$$\begin{aligned} 8\% &= \frac{8}{100} \\ &= \frac{2}{25} \end{aligned}$$

Percents \longrightarrow Decimals

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

$$105\% = 1.05$$

$$8\% = 0.08$$

$$37.5\% = 0.375$$

*Move decimal
two places
to the LEFT*

Decimals \longrightarrow Percents

$$0.42 = 42\%$$

$$0.08 = 8\%$$

$$1.23 = 123\%$$

$$5.1 = 510\%$$

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

FRACTION → PERCENT

$$\frac{1}{4} = 25\% \quad \frac{2}{5} = 40\%$$

DIVIDE *bottom*) *top.00*
THEN MOVE DECIMAL
TWO TO THE RIGHT

$$\frac{2}{7} = 28\frac{4}{7}\% \quad 1\frac{3}{8} = 137\frac{1}{2}\% \quad 2\frac{4}{9} = 244\frac{4}{9}\%$$

$$\begin{array}{r} .28 \\ 7 \overline{) 2.00} \\ \underline{-14} \\ 60 \\ \underline{-56} \\ 4 \end{array}$$

$$\begin{array}{r} .37 \\ 8 \overline{) 3.00} \\ \underline{-24} \\ 60 \\ \underline{-56} \\ 4 \end{array}$$

$$\begin{array}{r} .44 \\ 9 \overline{) 4.00} \\ \underline{-36} \\ 40 \\ \underline{-36} \\ 4 \end{array}$$

Fill in the chart. Show your work below.

$$\frac{36 \div 4}{100 \div 4} = \frac{9}{25}$$

Fraction	Percent	Decimal
$\frac{9}{25}$	36%	0.36
$4\frac{5}{8}$	$462\frac{1}{2}\%$ 462.5%	4.625
$3\frac{7}{25}$	328%	3.28

$$\frac{28 \div 4}{100 \div 4} = \frac{7}{25}$$

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

HOMEWORK

Lilac WS1

DUE Tuesday