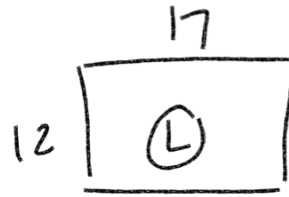
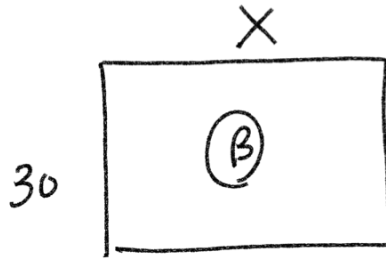


1.)



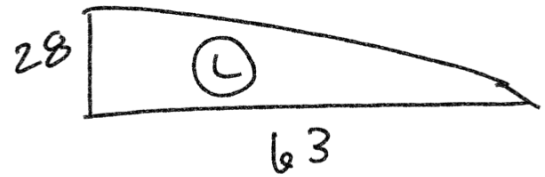
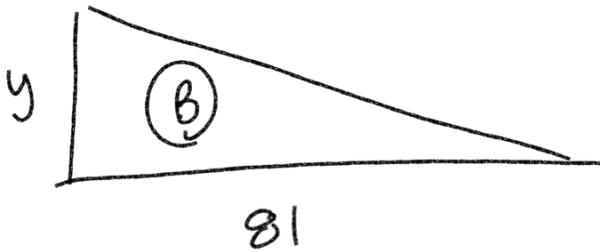
$$\frac{\text{Base}}{\text{Height}} = \frac{\text{Big'n } X}{30} \neq \frac{\text{Lil'n } 17}{12}$$

$$12X = (30)(17)$$

$$\frac{12X}{12} = \frac{510}{12}$$

$$X = 42.5$$

2.)



$$\frac{\text{Height}}{\text{Base}} = \frac{y}{81} \neq \frac{28}{63}$$

(B) (L)

$$63y = (81)(28)$$

$$\frac{63y}{63} = \frac{2268}{63}$$

$$y = 36$$

Nate's end of the year celebration got... weird.

<u>Injury</u>	<u>Number of Students</u>
---------------	---------------------------

broken bone	12
-------------	----

head trauma	16
-------------	----

mental distress	38
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emotional damage	10
------------------	----

stuffy nose	24
-------------	----

total	100
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a) $P(\text{mental distress})$

$$\frac{38 \div 2}{100 \div 2} = \boxed{\frac{19}{50}}$$

b) $P(\text{emotional damage or stuffy nose})$

$$\frac{10 + 24}{100} = \frac{34 \div 2}{100 \div 2} = \boxed{\frac{17}{50}}$$

c) $P(\text{not head trauma})$

$$\frac{100 - 16}{100} = \frac{84 \div 4}{100 \div 4} = \boxed{\frac{21}{25}}$$

d) $P(\text{had a good time})$

$$\boxed{0}$$

$$\frac{7}{10}$$

fraction \rightarrow percent

$$\frac{7}{10} \neq \frac{x}{100}$$

$$\frac{10x}{10} = \frac{700}{10}$$

$$x = 70\%$$

per - cent
 \swarrow \searrow
for every 100

$$\frac{17}{25} \neq \frac{x}{100}$$

(Note: Purple arrows indicate multiplying numerator and denominator by 4 to get 100 in the denominator. The number 68 is circled in purple.)

$$25x = (17)(100)$$

$$\frac{25x}{25} = \frac{1700}{25}$$

$$x = 68\%$$

$$x = 68$$

Convert from a fraction to a percent.

$$\frac{3}{5} \rightarrow 0.60 \rightarrow 60\%$$

fraction decimal percent

$$\frac{3}{5} \neq \frac{x}{100}$$

$$\Rightarrow \frac{3}{5}$$

$$5 \overline{) 3.0} \text{ RRP}$$
$$\begin{array}{r} 0.6 \\ 5 \overline{) 3.0} \\ \underline{-30} \\ 0 \end{array}$$

$$0.60$$

$$\frac{5x}{5} = \frac{300}{5}$$

$$x = 60$$

$$\frac{5}{8} \rightarrow \%$$

Division

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

$$0.625$$

$$\boxed{62.5\%}$$

Proportion

$$\frac{5}{8} = \frac{X}{100}$$

$$\frac{8X}{8} = \frac{500}{8}$$

$$\boxed{X = 62.5\%}$$

What percent

$$\rightarrow \frac{X}{100}$$

of
↓
*

75

75

is
↓
=

60

60

$$\frac{100}{75} \left(\frac{75X}{100} \right) = \left(\frac{60}{1} \right) \frac{100}{75} = \frac{6000}{75} = \boxed{80\%}$$

What percent of 50 is 60?

$$\begin{array}{c} \downarrow \\ X \\ \hline 100 \end{array}$$

$$\begin{array}{c} \downarrow \\ * \\ 50 \end{array} = \begin{array}{c} \downarrow \\ 60 \end{array}$$

$$\frac{100}{50} \left(\frac{50X}{100} \right) = (60) \frac{100}{50}$$

$$X = \frac{600}{50} = \boxed{120\%}$$

70% of 20 is what number?

$$\begin{array}{c} \downarrow \\ 70 \\ \hline 100 \end{array} * \begin{array}{c} \downarrow \\ 20 \\ \hline 1 \end{array} = \begin{array}{c} \downarrow \\ X \end{array}$$

$$\frac{1400}{100} = X = \boxed{14}$$

30% of 360 is what number?

$$\begin{array}{c} \downarrow \\ 30 \\ \hline 100 \end{array} * \begin{array}{c} \downarrow \\ 360 \end{array} = \begin{array}{c} \downarrow \\ X \end{array}$$

$$\frac{10800}{100} = X = \boxed{108}$$

