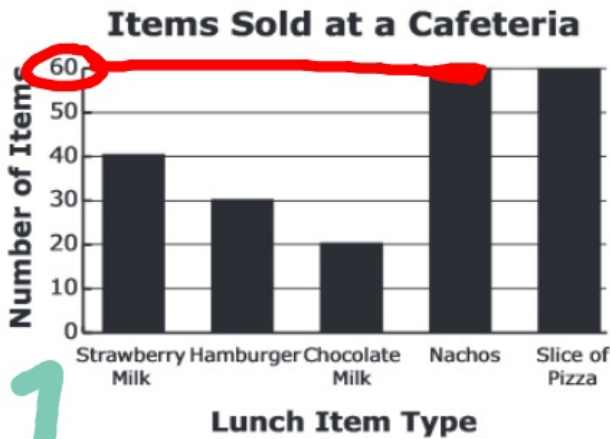


January 20, 2015^{4th} Starter

1. The graph shows the number of lunch items sold at a school cafeteria in one day.



1

At this rate, how many nachos will be sold in 5 days? 300

10

$$\frac{4}{b} = \frac{2 \cdot 2}{2 \cdot 9}$$

$b = 18$

2. Of the choices below, what is the best estimate of the length of a cell phone?

1

A 6 meters

B 6 centimeters

C 6 kilometers

B

3

Complete the sequence.

8, 24, 72, 216, _____

$\times 3 \times 3$

216
 $\times 3$

648

4. Write $<$, $>$, or $=$ in each blank.

$$\frac{2 \cdot 10}{2 \cdot 11}$$

$>$

$$\frac{19 \cdot 11}{21 \cdot 11}$$

$>$

$$\frac{10 \cdot 21}{12 \cdot 21}$$

Mellow

$$\frac{210}{231}$$

$$\frac{209}{231} \frac{228}{252}$$

$$\frac{210}{252}$$

1/15 - Proportions using Similar Figures

"Similar" means the figures...

- ~ have the same shape
- ~ can be different sizes
- ~ are proportional



Which of these moves result in similar shapes?

Similar

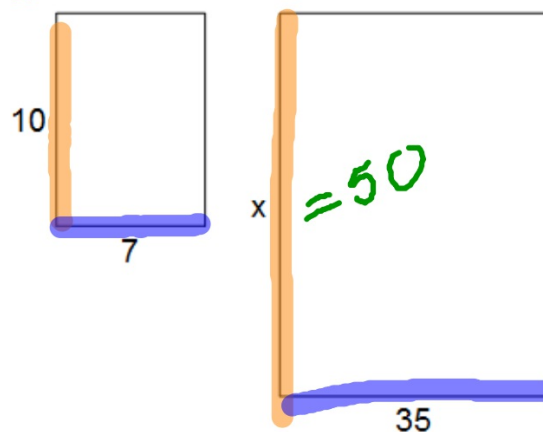
Slide
Zoom in
Zoom out
Rotate
Flip

NOT Similar

Horizontal Stretch
Vertical stretch

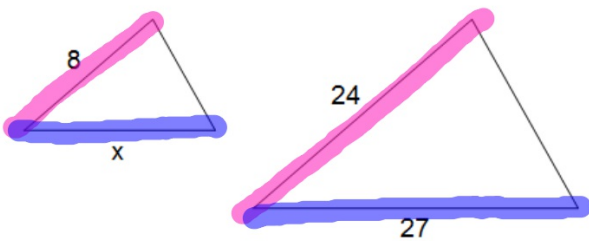
If two figures are similar, you can find missing side measurements since they are proportional!

Find the missing measurement.



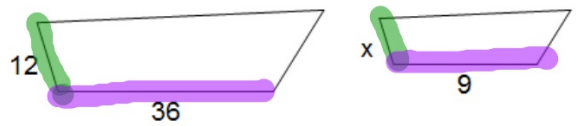
$$\begin{array}{r} 10 \cdot 5 \\ \hline 7 \cdot 5 \end{array} \quad \begin{array}{r} x \\ \hline 35 \end{array}$$
$$50 = x$$

Find the missing measurements of these similar figures.



$$\frac{8 \cdot 3}{x \cdot 3} = \frac{24}{27}$$

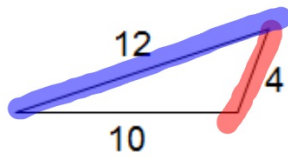
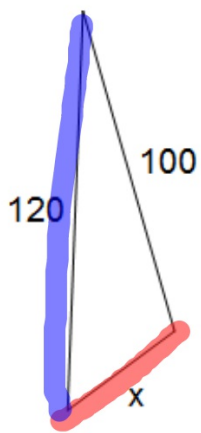
$$\frac{3x}{3} = \frac{27}{3}$$
$$x = 9$$



$$\frac{12}{36} = \frac{4 \cdot x}{4 \cdot 9}$$

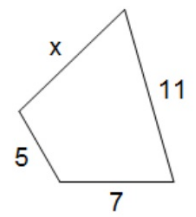
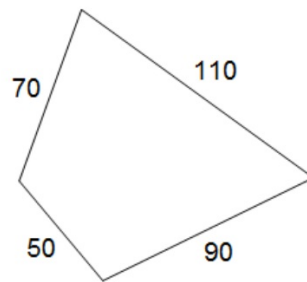
$$\frac{12}{4} = \frac{4x}{4}$$

$$3 = x$$



$$\frac{120}{x} = \frac{10 \cdot 12}{10 \cdot 4}$$

$$x = 40$$



Homework

Lime WS 2

Due Thursday