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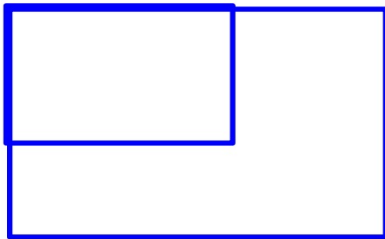
**January 4, 2012**

Get out your homework...

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## 1/4 - Similar Figures with Proportions



*"Similar" means the figures...*  
*~have the same shape*  
*~are different sizes*

*Which moves result in similar triangles?*

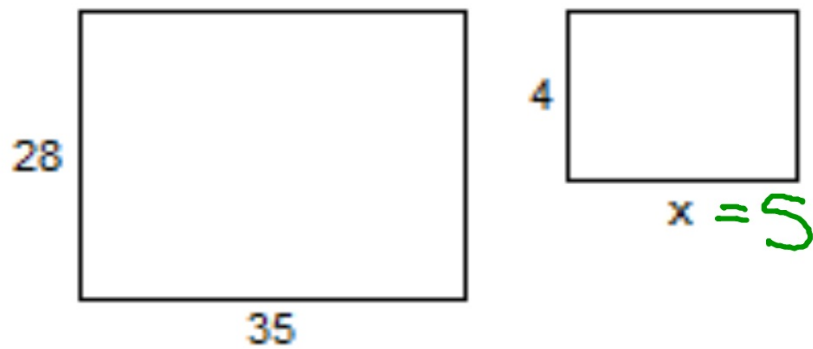
*similar*

Flip  
Zoom in  
Rotate  
Zoom out  
Slide

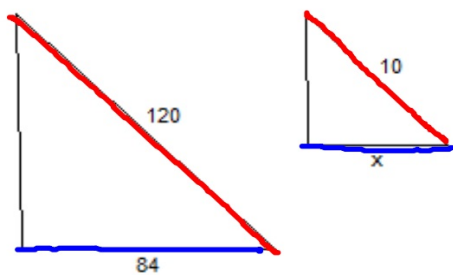
*not similar*

horizontal stretch  
vertical stretch

Find the missing measurements using proportions.



$$\begin{array}{l} \text{short} \rightarrow \\ \text{long} \rightarrow \end{array} \frac{28}{35} = \frac{4}{x}$$
$$\frac{28x}{28} = \frac{140}{28}$$



$$\frac{120}{84} = \frac{10}{x}$$

$$\frac{120x = 840}{120} \quad \frac{840}{120}$$

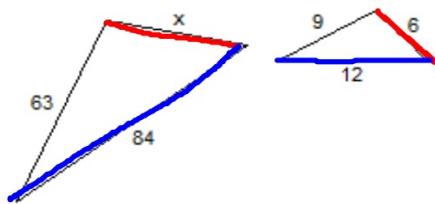
$$x = 7$$



$$\frac{96}{108} = \frac{x}{9}$$

$$\frac{108x = 864}{108} \quad \frac{864}{108}$$

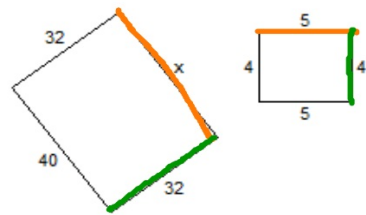
$$x = 8$$



$$\frac{x}{84} = \frac{6}{12}$$

$$\frac{12x}{12} = \frac{504}{12}$$

$$x = 42$$



$$\frac{x}{32} = \frac{5}{4}$$

$$\frac{4x}{4} = \frac{160}{4}$$

$$x = 40$$

## *Homework:*

*Print worksheet WS2*

*due Thursday*