

# January 25, 2012

*Get out your homework...*

$$16) \frac{12}{14} = \frac{P}{20}$$

$$\cancel{14}P = \frac{240}{14}$$

$$P = 17\frac{2}{14}$$

$$14 \overline{)240} \quad = 17\frac{1}{7}$$
  
$$\begin{array}{r} 17 \\ -14 \\ \hline 100 \\ -100 \\ \hline 0 \end{array}$$

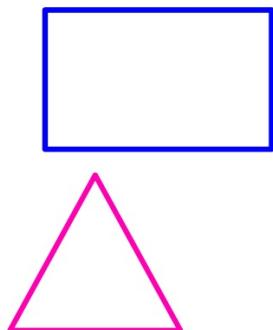
$$15) \frac{7}{x} = \frac{20}{16}$$

$$\cancel{20}x = \frac{112}{\cancel{20}}$$
  
$$x = 5\frac{3}{5}$$
  
$$20 \sqrt{112} = 5\frac{3}{5}$$
  
$$\begin{array}{r} 5 \\ -100 \\ \hline 120 \\ -100 \\ \hline 20 \\ -20 \\ \hline 0 \end{array}$$

## 1/25 - Similar Figures with Proportions

"Similar" means the figures...

- ~have the same shape
- ~are different sizes or positions



Which moves result in similar triangles?

similar

Zoom in

Rotate

Flip

Slide

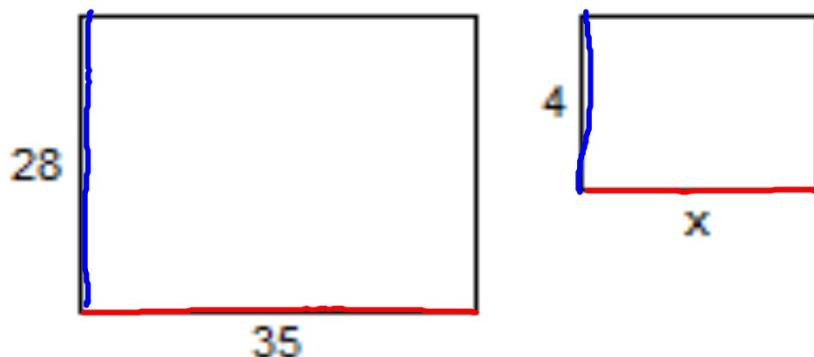
Zoom out

not similar

vertical stretch

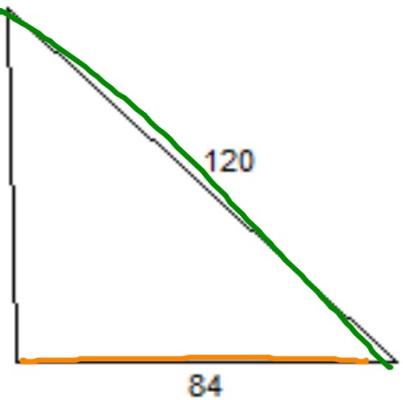
horizontal stretch

Find the missing measurements using proportions.



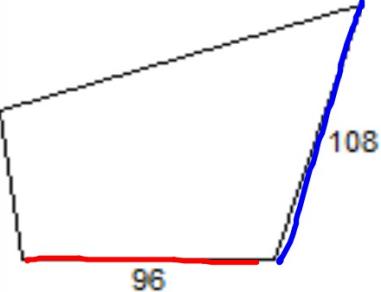
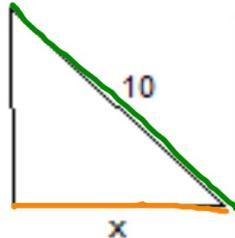
$$\frac{35 \div 7}{28 \div 7} = \frac{x}{4}$$

$$5 = x$$



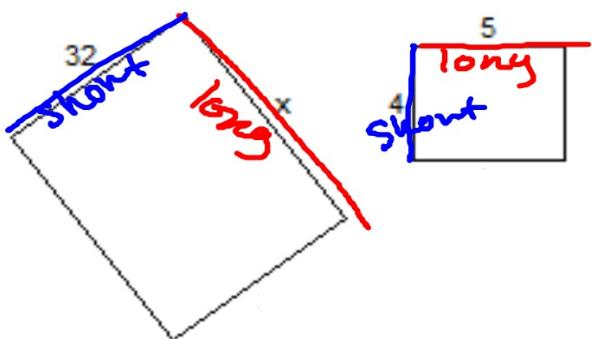
$$\frac{120 \div 12}{84 \div 12} = \frac{10}{x}$$

$$7 = x$$



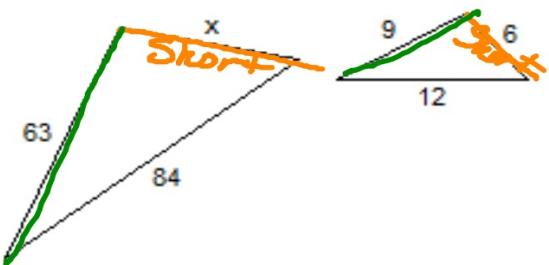
$$\frac{108 \div 12}{96 \div 12} = \frac{9}{x}$$

$$7 = x$$



$$\frac{x}{32} = \frac{8 \cdot 5}{8 \cdot 4}$$

$$x = 40$$



$$\frac{x}{63} = \frac{7 \cdot 6}{7 \cdot 9}$$

$$x = 42$$



*Homework:*

*Yellow worksheet 2*

*due Thursday*