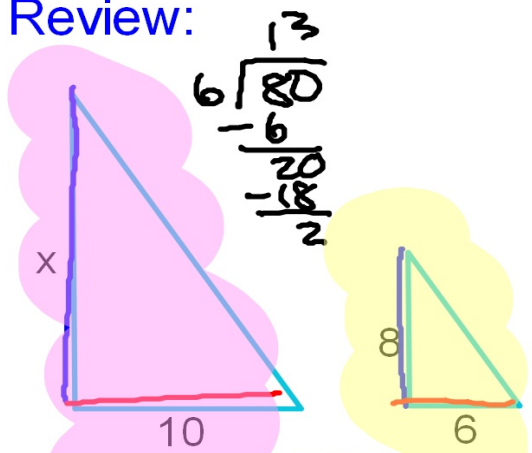

January 9, 2012

Get out your homework...

1/9 - Shadow Problems using Proportion

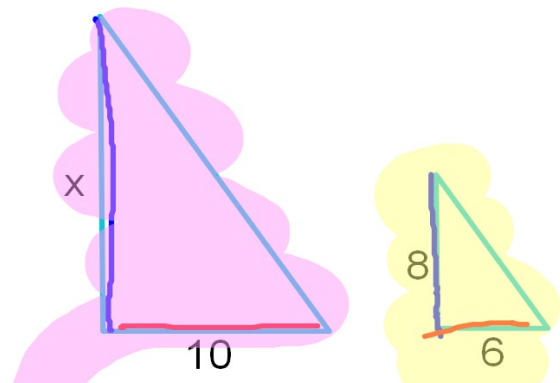
Review:



$$\begin{array}{r} 6 \overline{) 80} \\ \underline{60} \\ 20 \\ \underline{18} \\ 20 \\ \underline{18} \\ 20 \\ \underline{18} \\ 20 \end{array}$$

$$\frac{x}{10} = \frac{8}{6}$$

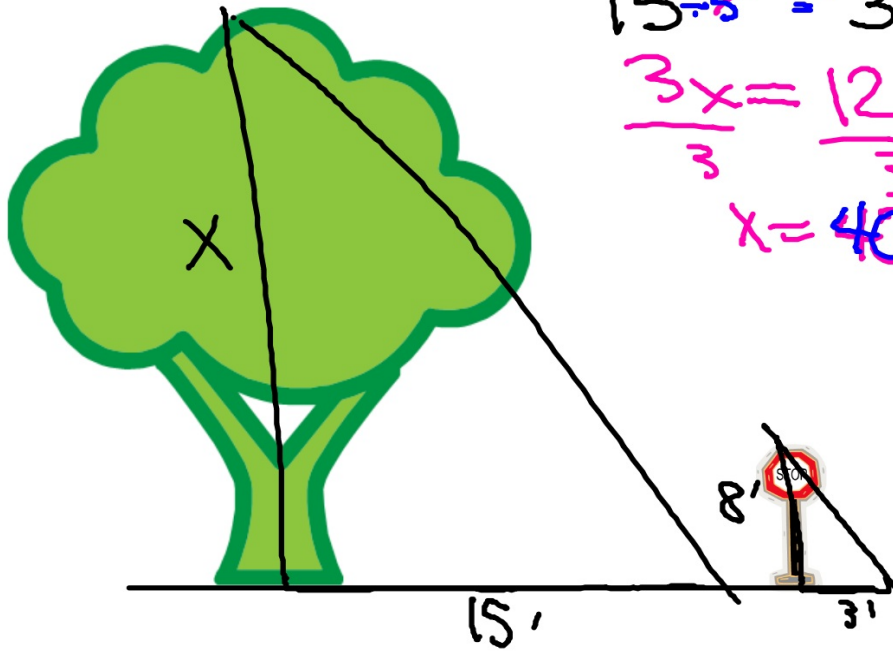
$$\frac{6x}{6} = \frac{80}{6}$$
$$x = 13\frac{1}{3}$$



$$\frac{x}{8} = \frac{10}{6}$$

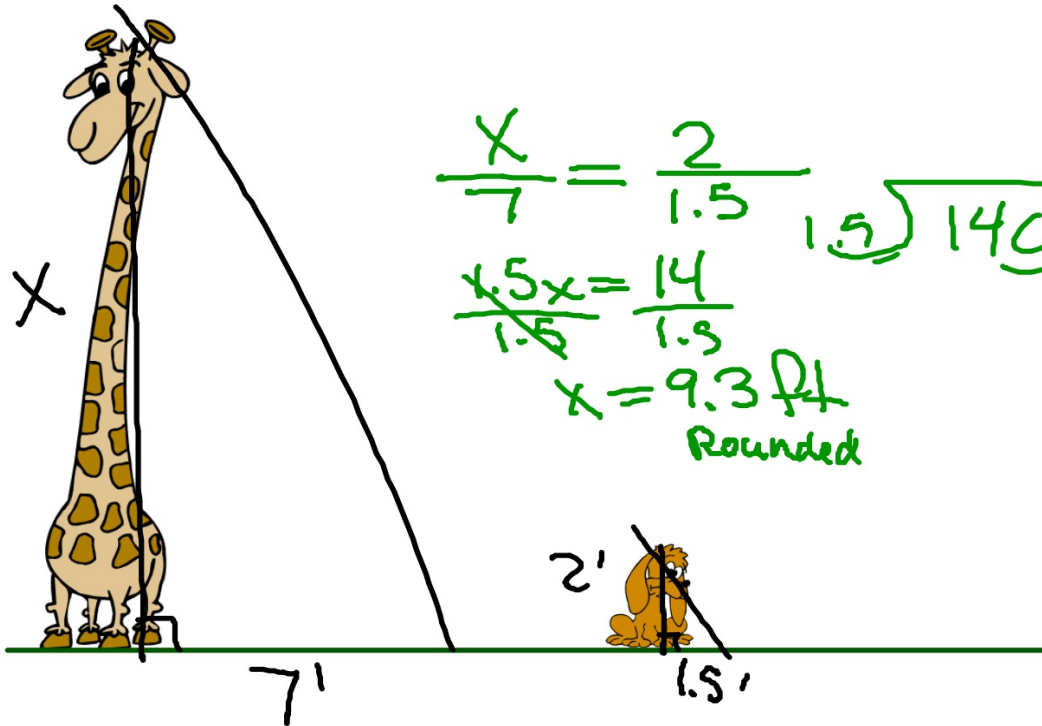
$$6x = 80$$





$$\begin{aligned} \frac{X \div 5}{15 \div 5} &= \frac{8}{3} \\ 3x &= 120 \\ \frac{3x}{3} &= \frac{120}{3} \\ x &= 40' \end{aligned}$$

11/13

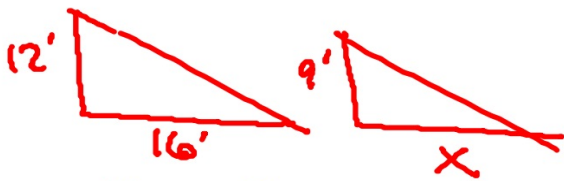


$$\frac{x}{7} = \frac{2}{1.5}$$
$$\frac{1.5x}{1.5} = \frac{14}{1.5}$$
$$x = 9.3 \text{ ft}$$

Rounded

$$1.5 \overline{) 140}$$

If a 12 ft tall statue casts a 16 ft long shadow then how long is the shadow that a 9 ft tall adult elephant casts?



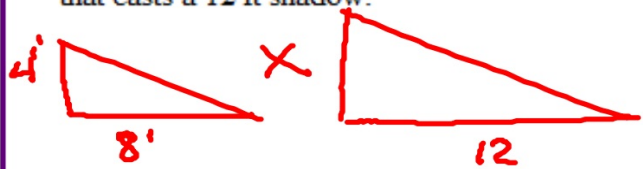
$$\frac{12}{16} = \frac{9}{x}$$

$$\frac{12x}{12} = \frac{144}{12}$$

$$x = 12'$$

Remember
to label!

A bird bath that is 4 ft tall casts a shadow that is 8 ft long. Find the height of a woman that casts a 12 ft shadow.



$$\frac{4}{8} = \frac{x}{12}$$

$$x = 6'$$

Homework

White **worksheet** WS3

Due: Tuesday