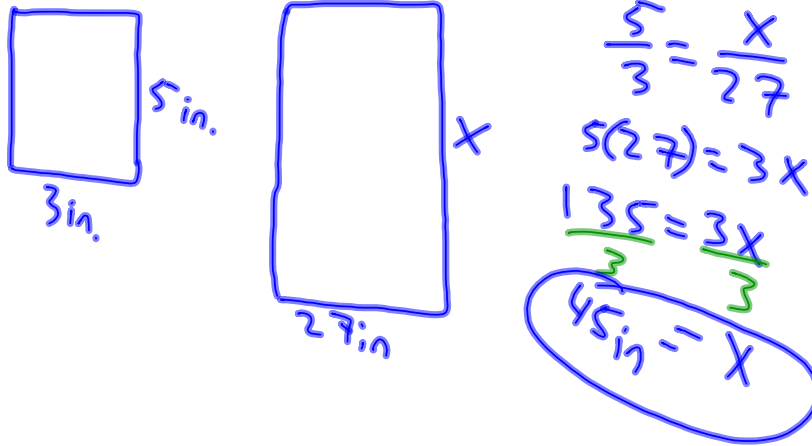
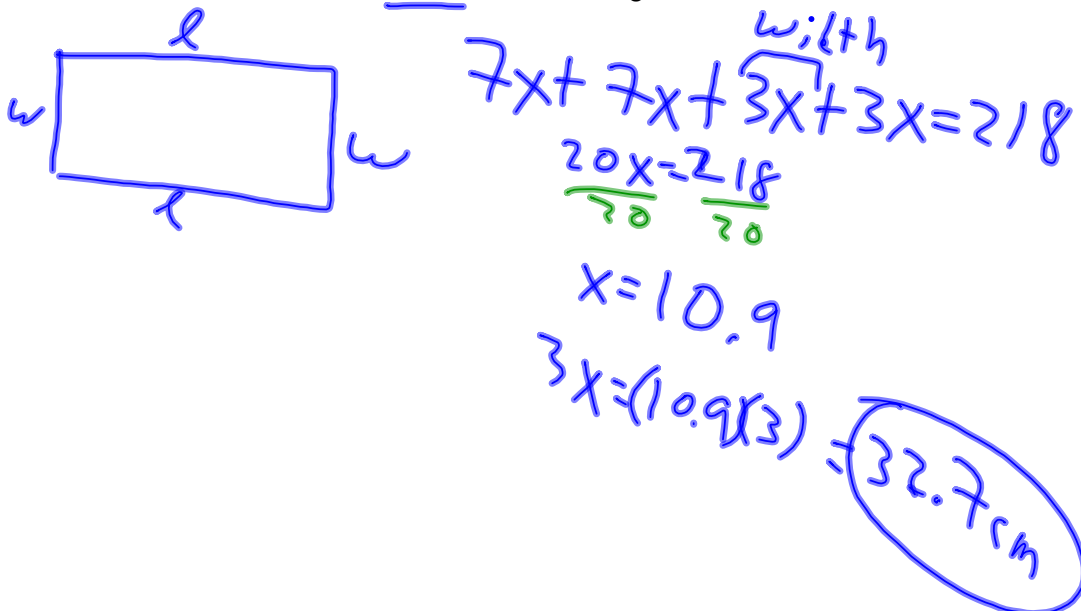


Geometry review for quiz 6-1 to 6-3

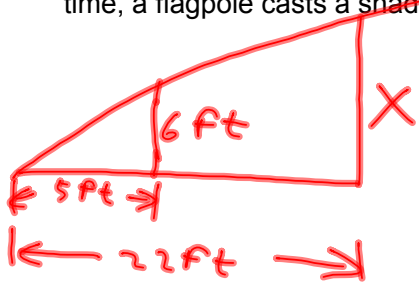
1.) A 3-inch by 5-inch photo set vertically (taller than it is wide), is enlarged to make a poster 27 inches wide. How tall is the poster?



2.) The perimeter of a rectangle is 218 cm. The ratio of the length to width is 7:3. Find the width of the rectangle.



3.) A person who is 6 feet tall casts a shadow that is 5 feet long. At the same time, a flagpole casts a shadow that is 22 feet long. how long is the flagpole?



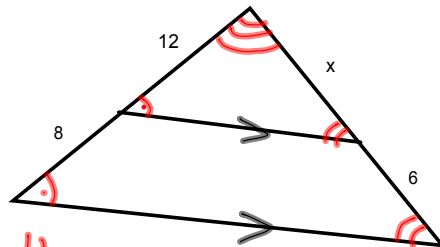
$$\frac{6}{5} = \frac{X}{22}$$

$$5X = (6)(22)$$

$$\frac{5X}{5} = \frac{132}{5}$$

$$X = 26.4 \text{ ft.}$$

4.) Find x



$$\frac{X}{X+6} = \frac{12}{12+8}$$

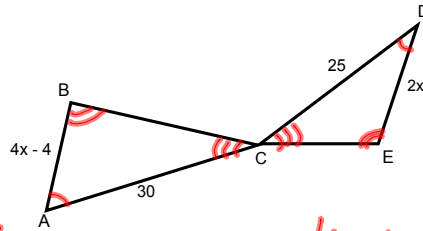
$$12(X+6) = X(20)$$

$$12X + 72 = 20X$$

$$\begin{array}{r} 12X + 72 = 20X \\ -12X \quad -12X \\ \hline 72 = 8X \\ \frac{72}{8} = \frac{8X}{8} \\ 9 = X \end{array}$$

$$\frac{12}{8} = \frac{X}{6}$$

5.) If $\triangle ABC \sim \triangle DEC$, find x and the scale factor of $\triangle ABC$ to $\triangle DEC$.



$$\frac{4x-4}{2x} = \frac{30}{25} \quad \text{or} \quad \frac{4x-4}{30} = \frac{2x}{25}$$

$$2x(30) = 25(4x-4)$$

$$60x = 100x - 100$$

$$\begin{array}{r} -100x \\ \hline -40x = -100 \end{array}$$

$$\begin{array}{r} -40x = -100 \\ \hline -40 \quad -40 \\ \hline x = 2.5 \end{array}$$

$$x = 2.5$$

Scale Factor

$$\frac{30}{25} = \frac{6}{5} \text{ or } 6:5$$

$$\text{or } 1.2$$