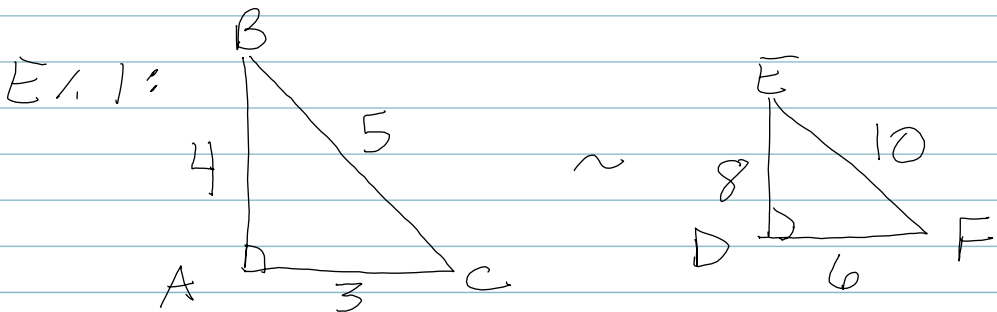


# Similar Figures

- 1.) Corresponding angles are  $\cong$
- 2.) Corresponding sides are in proportion



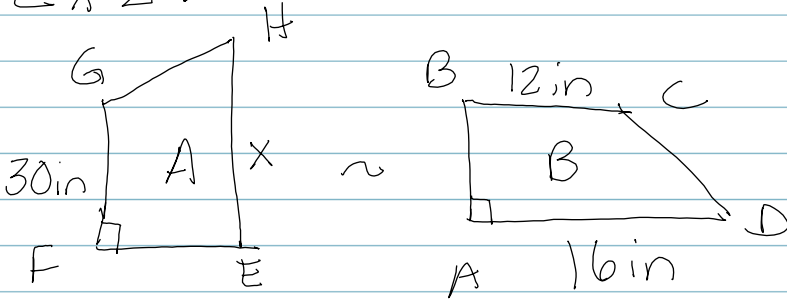
$$\angle A \cong \angle D$$

$$\angle B \cong \angle E$$

$$\angle C \cong \angle F$$

$$\frac{\triangle ABC}{\triangle DEF} \quad \frac{3}{6} = \frac{4}{8} = \frac{5}{10}$$
$$\downarrow$$
$$\frac{1}{2} = \frac{1}{2} = \frac{1}{2}$$

Ex 2:

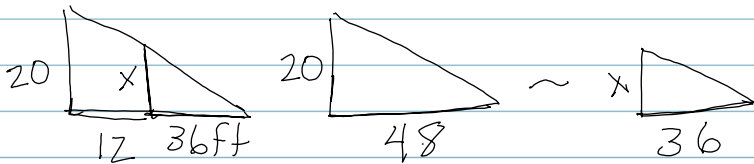


$$\frac{A(\text{in})}{B(\text{in})} = \frac{30}{12} = \frac{X}{16}$$

$$\begin{array}{r} \downarrow \text{(8)} \\ \underline{5} \quad X \\ 2 \quad \rightarrow 16 \\ \text{(8)} \end{array}$$

$$X = 40 \text{ inches}$$

Ex 3:



Big  $\Delta$   
Small  $\Delta$

$$\frac{48}{36} = \frac{20}{X}$$

$$\begin{array}{r} \downarrow \text{(3)} \\ \underline{4} \quad 20 \\ 3 \quad \rightarrow X \\ \text{(3)} \end{array}$$

$$X = 15 \text{ ft}$$