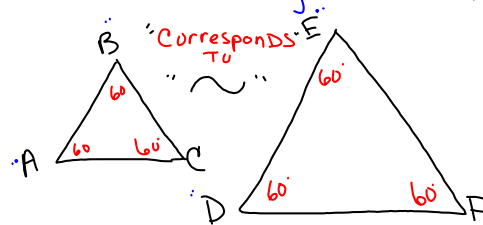


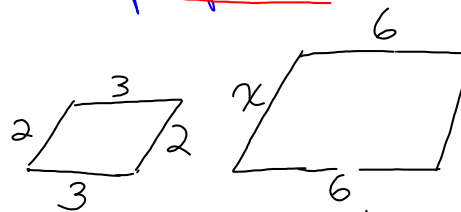
Chapter 9-7 1/2

Similar Figures

S.W.B.A.T. - Find corresponding parts to similar figures and find missing measures.



Similar figures -
if corresponding angles
are congruent AND (\sim) sides
are in proportion.



set up a proportion

$$\frac{\text{SIDE}}{\text{TOP}} = \frac{2}{3} = \frac{x}{6}$$

(2 ratios) (frac) (top)

1. cross multiply. to @ other

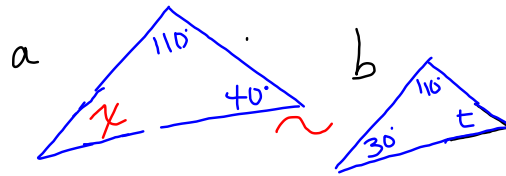
$$2 \times 6 = 3 \cdot x$$

$$12 = 3x \quad \text{Solve}$$

$$12 \div 3 = x$$

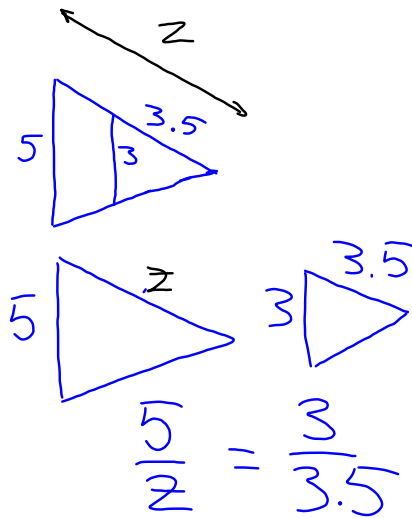
$$4 = x$$

Similar Triangles

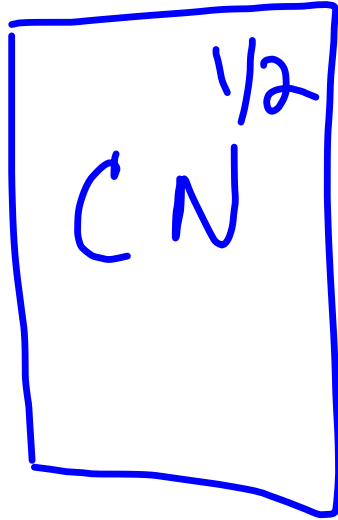


$$\begin{aligned} a) \quad x &= 180^\circ - (110^\circ + 40^\circ) \\ x &= 180^\circ - 150^\circ \\ x &= 30^\circ \end{aligned}$$

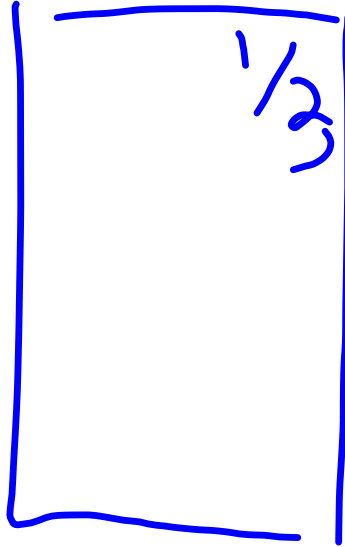
$$\begin{aligned} b) \quad t &= 180^\circ - (110^\circ + 30^\circ) \\ t &= 180^\circ - 140^\circ \\ t &= 40^\circ \end{aligned}$$



9-7



386+387



Practice

9-7

