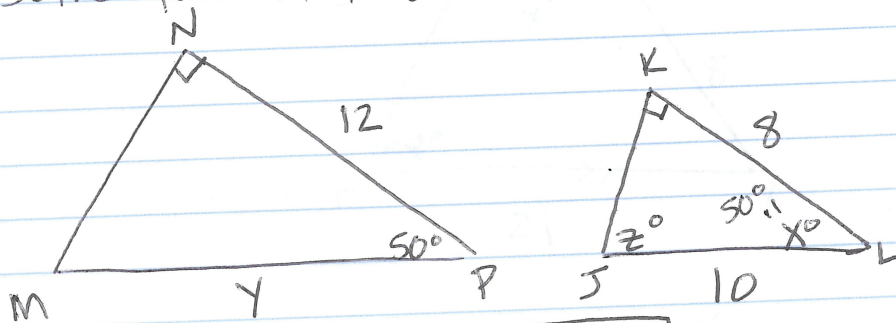


Congruent and Similar Triangles
Congruent Triangles: sides and angles are the same.

Similar Triangles: Angles are the same, side lengths are different.

Ex. solve for x , y , and z .



$$\frac{12}{8} = \frac{y}{10}$$

$$y = \frac{120}{8}$$

$$y = 15$$

$$\angle P = \angle L, \text{ so } \boxed{x = 50^\circ}$$

$$90 + 50 + z = 180$$

$$140 + z = 180$$

$$\begin{array}{r} -140 \\ \hline \end{array}$$

$$\boxed{z = 40^\circ}$$

$$90 + 50 + z = 180$$

$$140 + z = 180$$

$$\begin{array}{r} -140 \\ \hline \end{array}$$

$$z = 40$$