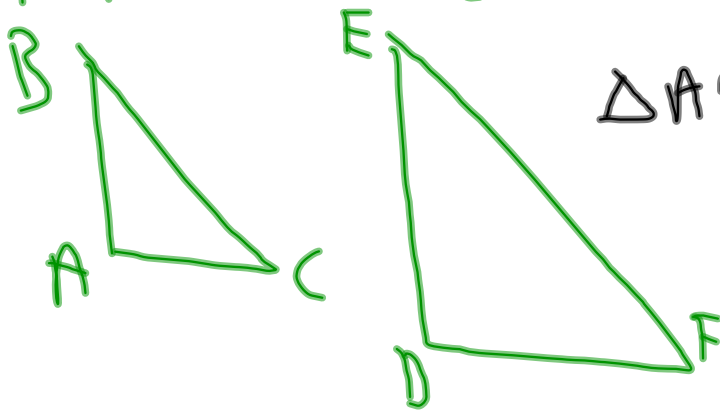


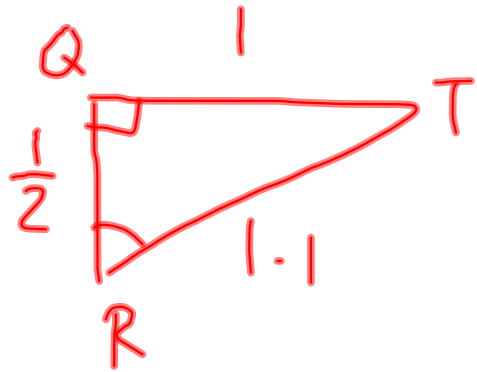
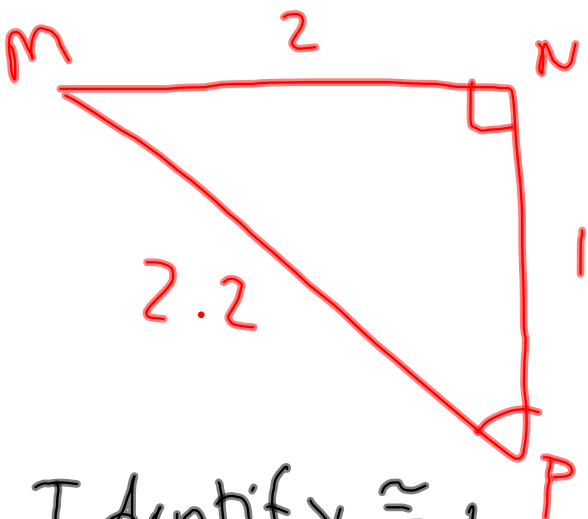
7.2 Similar Polygons

Similar (\sim): Figures with the same shape, but not necessarily the same size.



$$\triangle ABC \sim \triangle DEF$$

Similar polygons: 2 polygons
are similar iff corresponding
 \angle 's are \cong , and corresponding
sides are proportional.

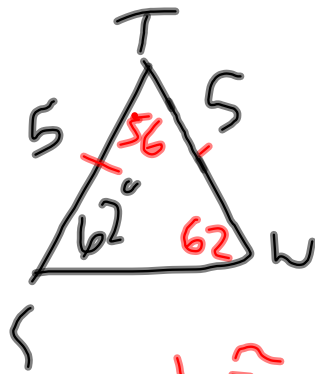
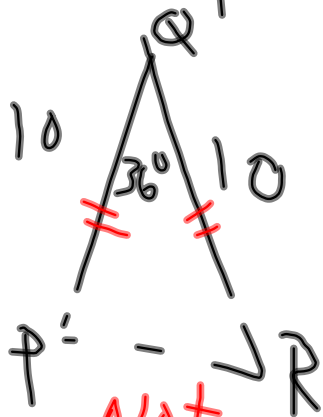


Identify \cong +
 \sim parts.

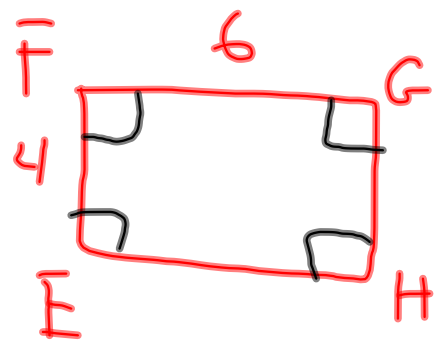
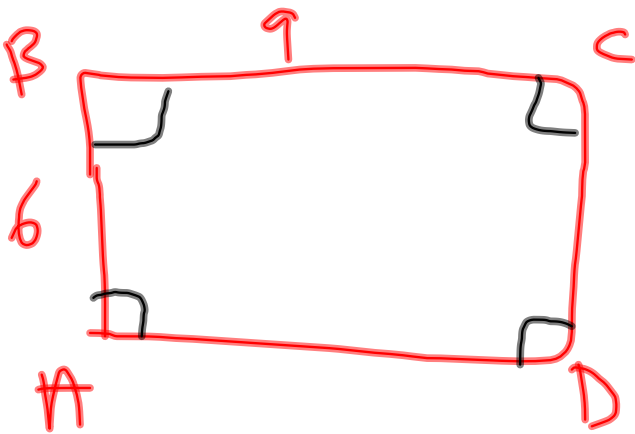
$$\begin{aligned} \angle N &\cong \angle Q \\ \angle P &\cong \angle R \\ \angle M &\cong \angle T \end{aligned}$$

$$\begin{aligned} \overline{QR} &\sim \overline{NP} \\ \overline{MP} &\sim \overline{RT} \\ \overline{MN} &\sim \overline{QT} \end{aligned}$$

Similarity Ratio: ratio of lengths of corresponding sides of 2 polygons.



Not similar $\triangle Q$ is not \cong to $\triangle T$



Both ABCD & EFGH are rect.

$$\frac{6}{4} = \left(\frac{3}{2}\right) \quad \frac{9}{6} = \frac{3}{2}$$

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