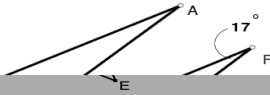


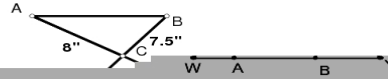
WORKSHEET - SIMILAR POLYGONS & TRIANGLES

Determine if each pair of triangles is similar. If they are similar, complete the similarity statement and state the method used to prove the similarity.

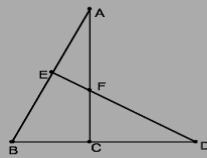
1) $\triangle ABC \sim \triangle$ _____ by _____



2) $\triangle ABC \sim \triangle$ _____ by _____

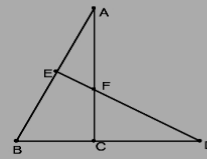


Given: $\overline{AC} \perp \overline{BD}$ and $\overline{DE} \perp \overline{AB}$
 Prove: $\triangle EFA \sim \triangle CFD$



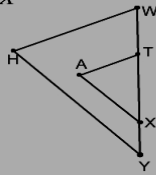
4. Given: $\overline{AE} \cong \overline{AF}$ and $\overline{DE} \cong \overline{DC}$

Prove: $\frac{AF}{DF} = \frac{EF}{FC}$



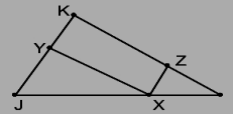
Given: $\overline{HW} \parallel \overline{TA}$, $\overline{HY} \parallel \overline{AX}$

Prove: $\frac{AX}{AT} = \frac{HY}{HW}$



6. Given: $\overline{XY} \parallel \overline{LK}$, $\overline{XZ} \parallel \overline{JK}$

Prove: $JY \cdot ZL = XZ \cdot YX$



Given: $\overline{AB} \perp \overline{BC}$, $\overline{AB} \perp \overline{AD}$, $\overline{AC} \perp \overline{CD}$

Prove: $BC \cdot AD = (AC)^2$

8* Prove that the intersection of the diagonals of a trapezoid divides the diagonals proportionally.

A woman near the pole casts a shadow 0.75 meters long. The woman is 1.5 meters tall. How tall is the flag pole?