## **Triangle Proofs - Independent Practice Worksheet**

Complete all the problems. Make sure to draw pictures to help you solve the problems.

Given  $m \angle 4 = m \angle 6$ 

$$m \angle 1 = m \angle 3$$

$$m\angle 4 = m\angle 5$$

1. Is 
$$\angle R \cong \angle T$$

2. Is 
$$\angle SQT \cong \angle PQR$$

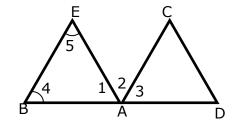
Given ∠BAC ≅ ∠DAE

$$AE \cong AC$$

A is the midpoint BD

3. Is 
$$\triangle BEA \cong \triangle DCA$$
?

4. Sum of 
$$\angle 1$$
 ,  $\angle 2$  and  $\angle 3$  is  $160^{\circ}$ 



5. If the value of  $\angle 4$  is 60°. Find the value of  $\angle 5$  in the figure.

Given  $GK \cong ML$ ,  $\angle GKM \cong \angle LMK$ 

6. Is 
$$\Delta GKM \cong \Delta LMK$$
?

Given AB  $\perp$  BE, DE  $\perp$  BE,

$$AC \cong DC$$
 and  $\angle BAC \cong \angle EDC$ 

8. Is 
$$\triangle ABC \cong \triangle DEC$$
?

$$9. AB = BC?$$

10. AC 
$$\cong$$
 CD?

