

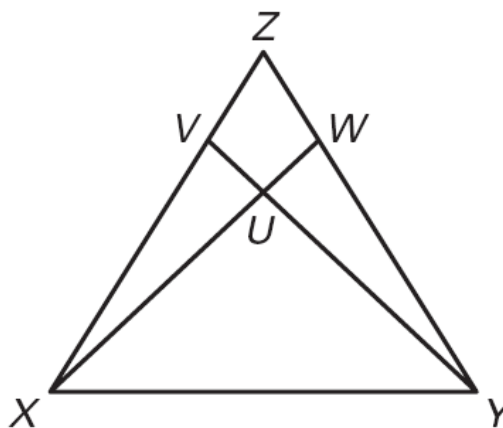
Name: \_\_\_\_\_

## Congruent Triangles

In numbers 1 till 6, refer to the diagram and write a two-column proof.

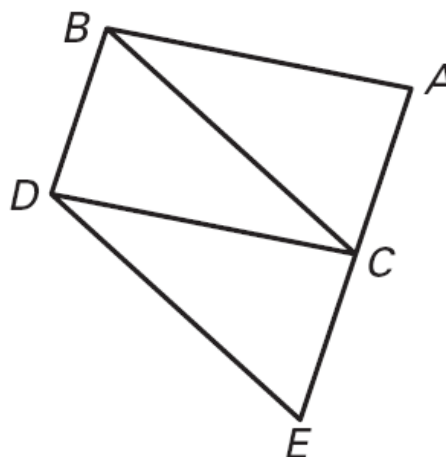
- 1) **Given:**  $XV = YW, VY = WX$

**Prove:**  $\triangle XVY \cong \triangle YWX$



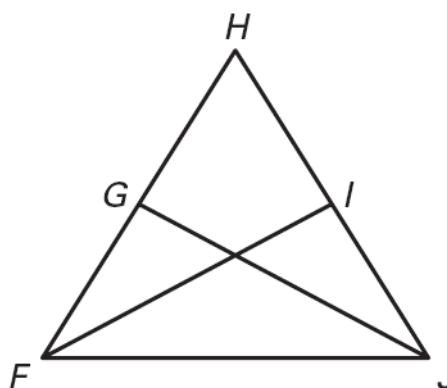
- 2) **Given:**  $C$  bisects  $\overline{AE}, \overline{AB} \perp \overline{CD}, \overline{AB} \cong \overline{CD}$

**Prove:**  $\triangle ABC \cong \triangle CDE$



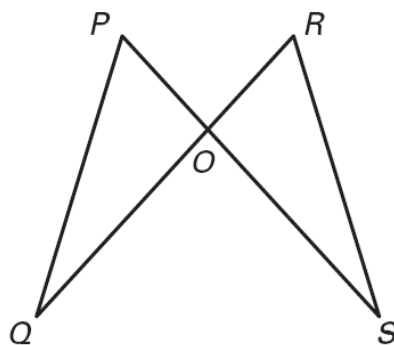
- 3) **Given:**  
 $GH = HI, G$  bisects  $\overline{FH}, I$  bisects  $\overline{HJ}$

**Prove:**  $\triangle FHI \cong \triangle JHG$



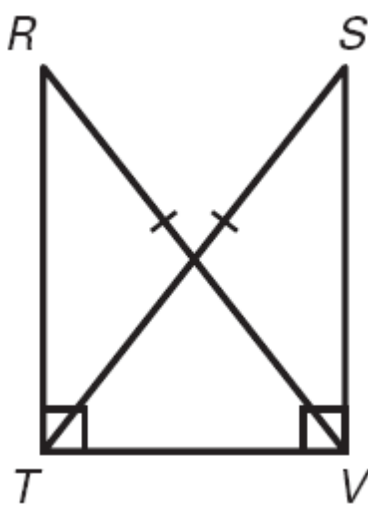
- 1) **Given:**  $OP = OR, OQ = OS$

**Prove:**  $\triangle POQ \cong \triangle ROS$



- 2) **Given:**  $\overline{RV} \cong \overline{ST}$   
 $\angle RTV$  and  $\angle SVT$  are right angles

**Prove:**  $\triangle RTV \cong \triangle SVT$



- 3) **Given:**  $\overline{PQ} \cong \overline{RS}, \overline{PT} \cong \overline{QS}, \overline{QR} \cong \overline{ST}$

**Prove:**  $\triangle PQR \cong \triangle RST$

