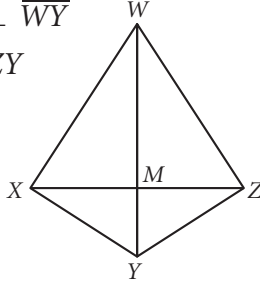


# Lesson 13.3 • Triangle Proofs

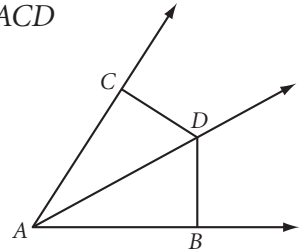
Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

Write a proof for each situation. You may use theorems added to your theorem list through the end of Lesson 13.3.

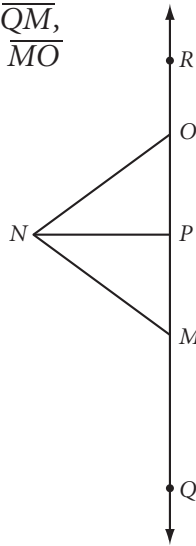
- 1. Given:**  $\overline{XY} \cong \overline{ZY}$ ,  $\overline{XZ} \perp \overline{WY}$   
**Show:**  $\triangle WXY \cong \triangle WZY$



- 2. Given:**  $\overline{CD} \perp \overline{AC}$ ,  $\overline{BD} \perp \overline{AB}$ ,  $\overline{CD} \cong \overline{BD}$   
**Show:**  $\triangle ABD \cong \triangle ACD$



- 3. Given:**  $\overline{MN} \cong \overline{QN}$ ,  $\overline{MO} \cong \overline{NO}$ ,  
 P is the midpoint of  $\overline{MO}$   
**Show:**  $\angle QMN \cong \angle QON$



- 4. Given:**  $\overline{AB} \cong \overline{BC}$ ,  $\angle ACB \cong \angle ECD$ ,  
 $\overline{AB} \perp \overline{BD}$   
**Show:**  $\overline{BD} \perp \overline{CE}$

