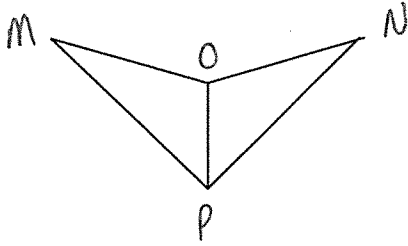


Proving Triangle Congruence by SAS & HL – Day 2
Unit 4: Similarities

Prove each of the following using an emphasis on Side-Angle-Side and Hypotenuse-Leg:

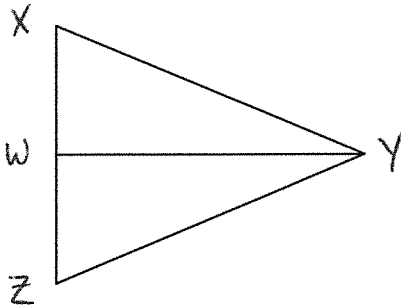
1. Given: $\overline{MP} \cong \overline{NP}$
 \overline{OP} bisects $\angle MPN$

Prove: $\triangle MOP \cong \triangle NOP$



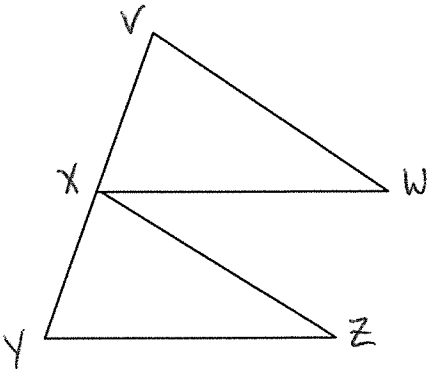
2. Given: $\overline{YW} \perp \overline{XZ}$
 $\overline{XY} \cong \overline{ZY}$

Prove: $\triangle XYW \cong \triangle ZYW$



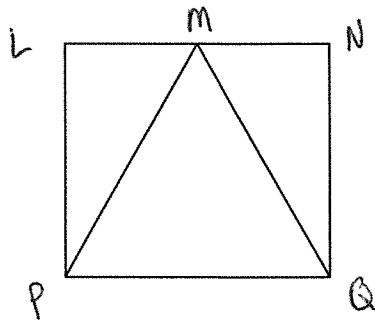
3. Given: $\overline{WX} \cong \overline{ZY}$
X is the midpoint of \overline{VY}
 $\overline{XW} \parallel \overline{YZ}$

Prove: $\triangle VXW \cong \triangle XYZ$

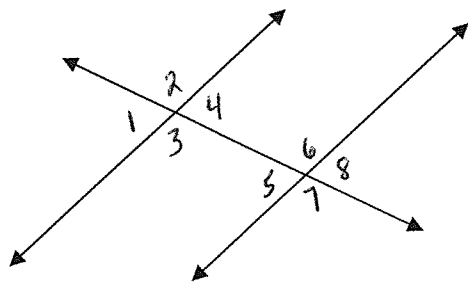


4. **Given:** LNQP is a rectangle
 ΔMPQ is an equilateral triangle
M is the midpoint of \overline{LN}

Prove: $\Delta LMP \cong \Delta NMQ$



Material that needs to be reviewed:



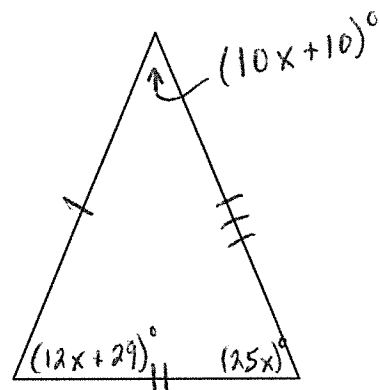
5a. List all the pairs of Corresponding Angles:

5b. List all the pairs of Alternate Interior Angles:

5c. List all the pairs of Alternate Exterior Angles:

5d. List the Same-Side Interior Angles:

5e. List all of the Vertical Angles:



6. Classify the given triangle by its angles.
Explain your answer.

7. Classify the given triangle by its sides:
Explain your answer.