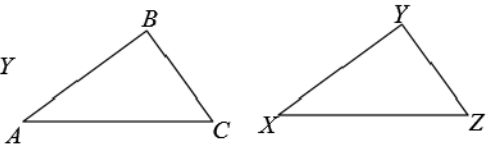
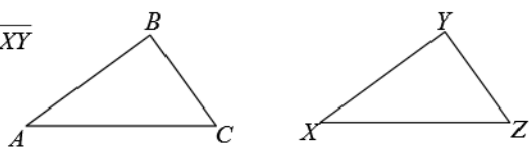
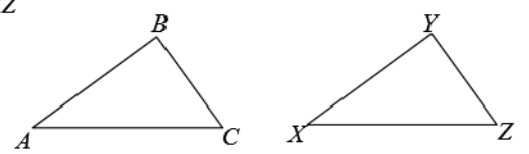


1-3. Complete the following. Drawing a picture may help.

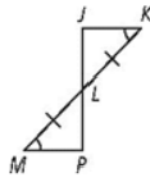
- In $\triangle ABC$, the angle that lies opposite \overline{AC} is \angle _____.
- If two right triangles have one pair of equal legs, are the triangles necessarily congruent? (Yes or No)
- In $\triangle XYZ$, if $\overline{XY} \cong \overline{XZ}$, then \angle _____ \cong \angle _____.

On problems 4-6, state an abbreviation of a postulate or theorem (SSS, SAS, AAS, ASA, HL) that you could use to prove that $\triangle ABC \cong \triangle XYZ$. If none, write "none".

- $\angle C \cong \angle Z, \overline{AB} \cong \overline{XY}, \angle B \cong \angle Y$

- $\angle C \cong \angle Z, \overline{AC} \cong \overline{XZ}, \overline{AB} \cong \overline{XY}$

- $\overline{AB} \cong \overline{XY}, \overline{BC} \cong \overline{XY}, \overline{AC} \cong \overline{XZ}$


7. Write a two-column proof.

Given: $\angle K \cong \angle M$
 $\overline{KL} \cong \overline{ML}$



Prove: $\triangle JKL \cong \triangle PML$

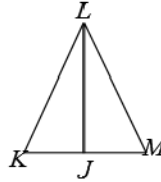
Statements	Reasons
1)	1) Given
2)	2)
3)	3)

8. Write a PARAGRAPH proof.

Given: $\angle KLJ \cong \angle MLJ$

$\overline{KL} \cong \overline{ML}$

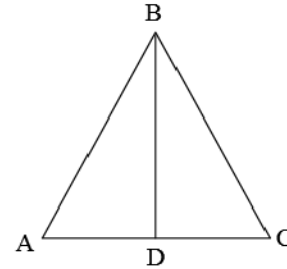
Prove: $\triangle JKL \cong \triangle JML$



9. Given: $\overline{AB} \cong \overline{CB}$, D is the midpoint of \overline{AC}

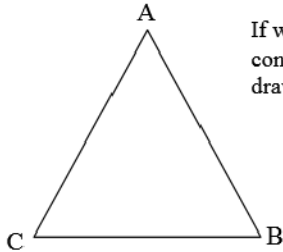
Prove: $\triangle ADB \cong \triangle CDB$

Statements	Reasons
1. $\overline{AB} \cong \overline{CB}$ D is the midpoint of \overline{AC}	1.
2. $\overline{AD} \cong \overline{CD}$	2.
3.	3.
4.	4.



10. Write the **standard form** of the equation of the perpendicular bisector of AB given A (3,5) and B (8,3).

11. In the figure below, $AB > BC$.



If we assume that $m\angle A = m\angle C$, it follows that $AB=BC$. This contradicts the given statement that $AB > BC$. What conclusion can be drawn from this contradiction?

- A. $m\angle A = m\angle B$
- B. $m\angle A \neq m\angle B$
- C. $m\angle A = m\angle C$
- D. $m\angle A \neq m\angle C$