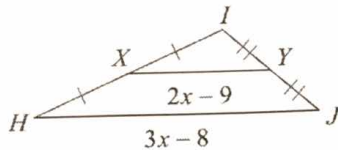


Unit 4 Quiz Review

Solve for x .

1)

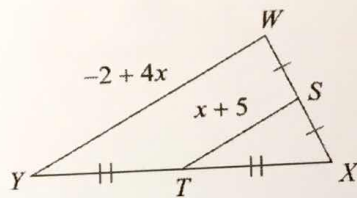


$$2(2x-9) = 3x-8$$

$$4x-18 = 3x-8$$

$$x = 10$$

2)



$$2(x+5) = -2+4x$$

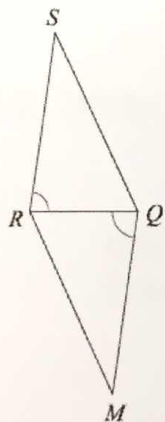
$$2x+10 = -2+4x$$

$$-2x = -12$$

$$x = 6$$

State what additional information is required in order to know that the triangles are congruent for the reason given.

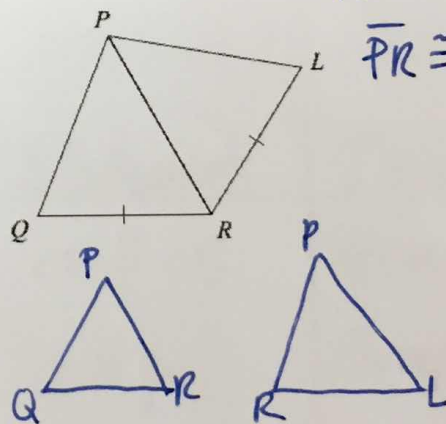
3) ASA



$$\overline{RQ} \cong \overline{RQ}$$

$$\angle MRQ \cong \angle SQR$$

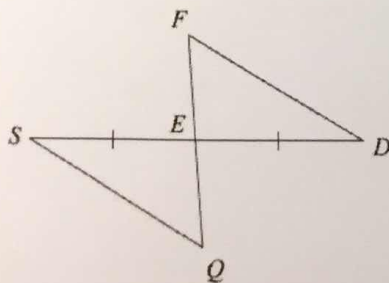
4) SSS



$$\overline{PL} \cong \overline{PR}$$

$$\overline{PR} \cong \overline{PQ}$$

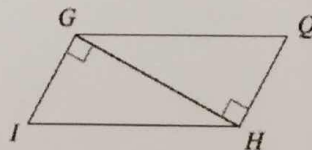
5) SAS



$$\angle SEQ \cong \angle DEF$$

$$\overline{EQ} \cong \overline{EF}$$

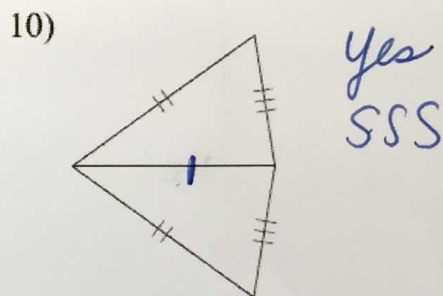
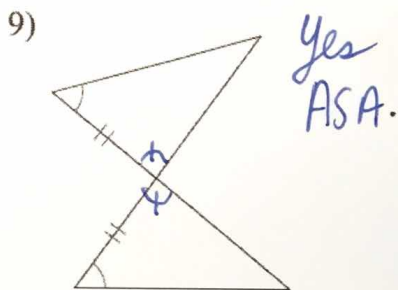
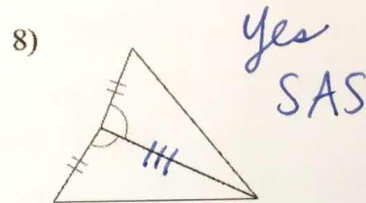
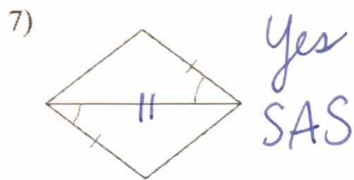
6) HL



$$\overline{HG} \cong \overline{HG}$$

$$\overline{GI} \cong \overline{HQ}$$

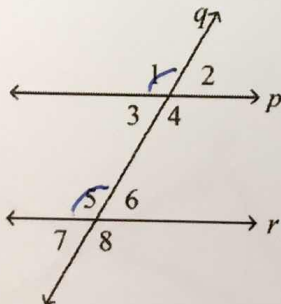
State if the two triangles are congruent. If they are, state how you know.



11. Write a two-column proof.

Given: $\angle 1 \cong \angle 5$

Prove: $p \parallel r$

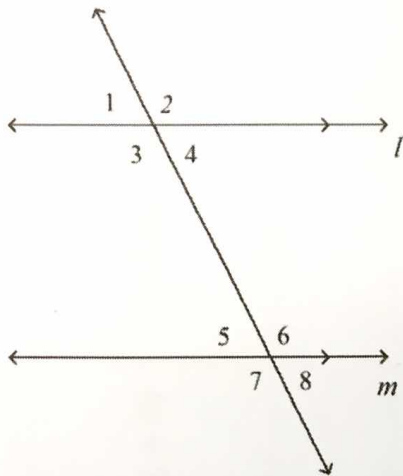


Statements	Reasons
1. $\angle 1 \cong \angle 5$	Given
2. $p \parallel r$	Corres. \angle 's \cong Converse

12. Write a two-column proof.

Given: $\angle 2$ and $\angle 5$ are supplementary.

Prove: $l \parallel m$

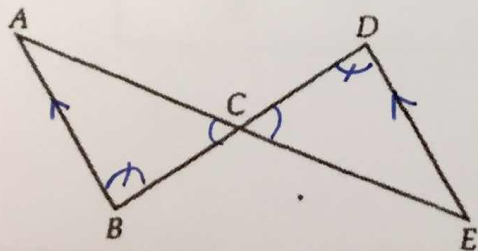


Statements	Reasons
1. $\angle 2$ and $\angle 5$ are suppl.	1. Given
2. $\angle 2 \cong \angle 3$	2. Vertical \angle 's \cong
3. $\angle 3$ and $\angle 5$ are suppl.	3. Substitution
4. $l \parallel m$	4. Same Side Int \angle 's Converse

13. Write a two-column proof.

Given: $\overline{AB} \parallel \overline{DE}$

Prove: $\triangle ABC \sim \triangle EDC$



Statements	Reasons
1. $\overline{AB} \parallel \overline{DE}$	1. Given
2. $\angle ABC \cong \angle EDC$	2. Alt. Int \angle 's \cong
3. $\angle DCE \cong \angle BCA$	3. Vertical \angle 's are \cong
4. $\triangle ABC \sim \triangle EDC$	4. AA \sim