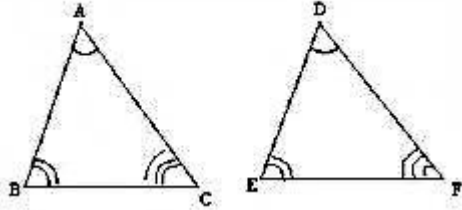


11R REVIEW TRIANGLES

Name: _____ Per: _____

SHOW YOUR WORK AND WORK IN PENCIL

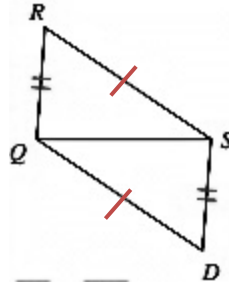
1. Determine if the pair of triangles are congruent. If yes, complete the given congruence statement and name the theorem of congruence (SAS, ASA, SSS, AAS). If no, tell how you know it may not be congruent.



a. Congruent? YES / NO

$$\triangle ABC \cong \triangle \underline{\hspace{2cm}}$$

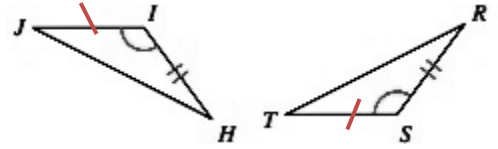
Theorem:



b. Congruent? YES / NO

$$\triangle RQS \cong \triangle \underline{\hspace{2cm}}$$

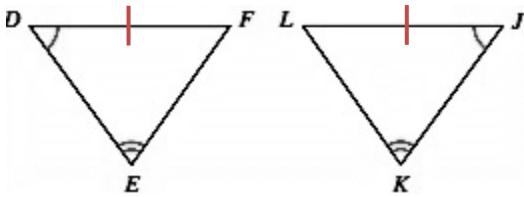
Theorem:



c. Congruent? YES / NO

$$\triangle JHI \cong \triangle \underline{\hspace{2cm}}$$

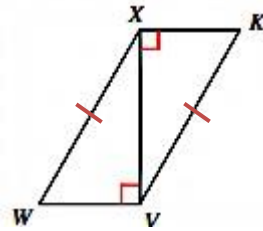
Theorem:



d. Congruent? YES / NO

$$\triangle \underline{\hspace{2cm}} \cong \triangle KJL$$

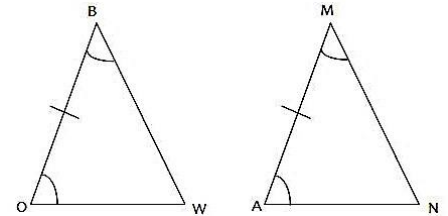
Theorem:



e. Congruent? YES / NO

$$\triangle WVX \cong \triangle \underline{\hspace{2cm}}$$

Theorem:

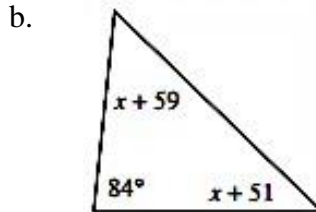
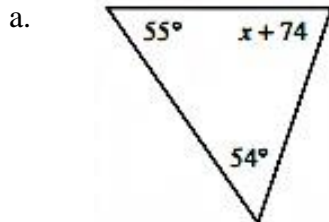


f. Congruent? YES / NO

$$\triangle WOB \cong \triangle \underline{\hspace{2cm}}$$

Theorem:

2. Solve for x and find the missing angles.



- c. If angle $a = 60 + x$ and angle $b = 2x - 45$ and angle $c = 3x + 10$, find x

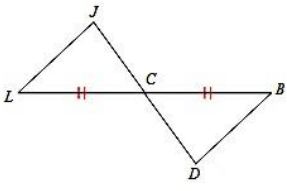
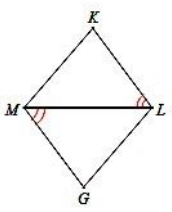
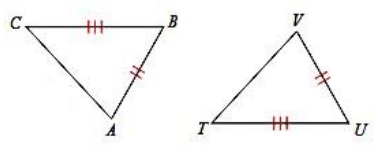
3. Decide if the following side lengths can make a triangle. EXPLAIN why or why not.

a. 8, 5, 4

b. 5, 6, 2

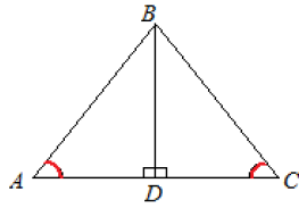
c. 8, 2, 4

4. Mark **ONLY ONE** additional corresponding piece of information to know that the triangles are congruent for the theorem listed.

<p>a. AAS</p> 	<p>b. SAS</p> 	<p>c. SSS</p> 
-------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------

5. Fill in the blanks for the following proof.

Given: $\angle ADB$ and $\angle CDB$ are right angles
 $\angle A \cong \angle C$
Prove: $\triangle ADB = \triangle CDB$



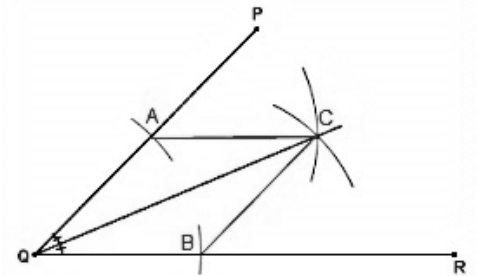
Statement

Reason

6. Given the following construction of an angle bisector, prove that the triangles are congruent. Then by CPCTC (Corresponding Parts of Congruent Triangles are Congruent) that QC bisects $\angle PQR$.

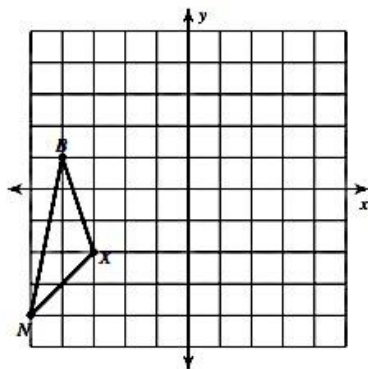
Statement

Reason

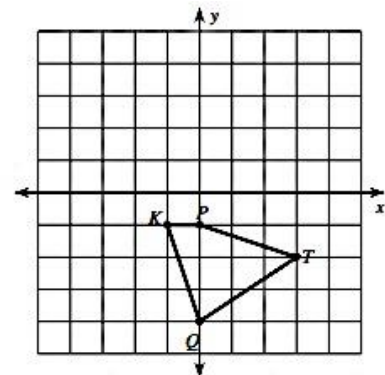


7. Find the **perimeter** (exact and estimate to the nearest 10th) of the following images.

a.



b.



c. Triangle with points $(3, 5)$, $(6, 9)$ and $(0, 17)$

