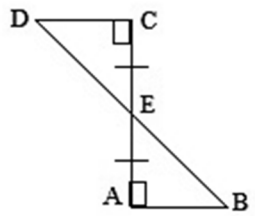
11.3H More Triangles (SSS, SAS, ASA, & AAS) Name: _____Per: _____

SHOW YOUR WORK AND WORK IN PENCIL

1.

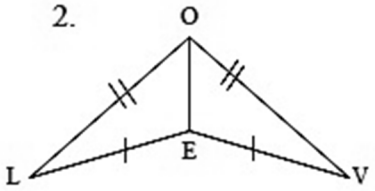


a. _____

b. Δ_____ ≅ Δ_____

c. _____

2.

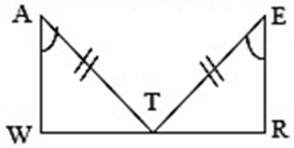


a. _____

b. Δ_____ ≅ Δ_____

c. _____

3. Given: T is the midpoint of $\overline{WR}$

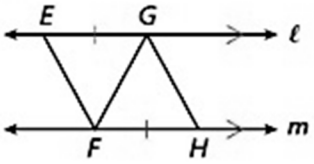


a. _____

b. Δ_____ ≅ Δ_____

c. _____

4.

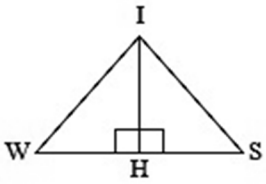


a. _____

b. Δ_____ ≅ Δ_____

c. _____

5. Given: $\overrightarrow{IH}$ Bisects ∠WIS

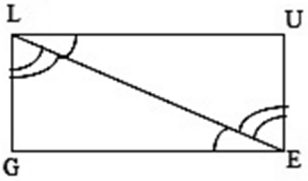


a. _____

b. Δ_____ ≅ Δ_____

c. _____

6.

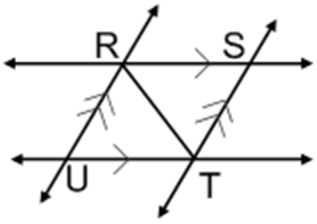


a. _____

b. Δ_____ ≅ Δ_____

c. _____

7.

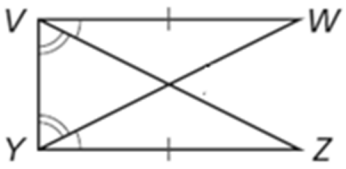


a. _____

b. Δ_____ ≅ Δ_____

c. _____

8.

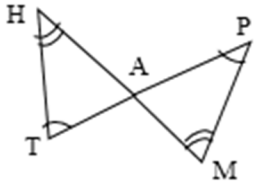


a. _____

b. Δ_____ ≅ Δ_____

c. _____

9.



a. _____

b. Δ_____ ≅ Δ_____

c. _____

For each pair of triangles, tell: (a) whether the triangles are congruent, (b) the congruence statement and (c) the congruence theorem. If they are not congruent, **explain why and make <u>ONE</u> additional mark** that would allow for a congruence theorem.

Are the following statements True or False. **Explain** your reasoning.

_____ 10. It's possible to prove two triangles congruent without knowing any of the side lengths. Explain:

_____ 11. It's possible to prove two triangles congruent without knowing any of their angle measures. Why?

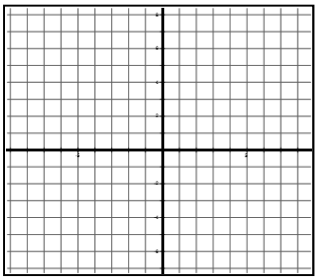
12. **Sketch** two triangles and **label** the specified congruent parts for each. **Explain** how you know the triangles are/aren't congruent with only those measures.

a. Angle-Side-Angle (ASA) b. Angle-Angle-Side (AAS) c. Side-Side-Side (SSS)

d. Angle-Angle-Angle (AAA) e. Side-Side-Angle (SSA) f. Side-Angle-Side (SAS)

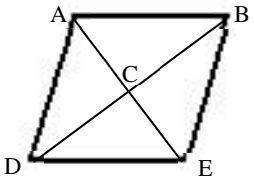
13. Plot the following points **A(3,7), B(-6,-2), and C(-2,-6).**

a. Determine point D so that quadrilateral ABCD is a rectangle.



How do you know that ABCD is a rectangle?

14. Prove that ΔABC & ΔEDC using a two-column table. (Use as many lines as needed)
Given: $AB \parallel DE$ and $AB \cong DE$
Prove: $\Delta ABD \cong \Delta EDB$



Statement	Reason

15. State and mark the **<u>ONE</u>** additional side/angle congruence that is required in order to know that the triangles are congruent for the theorem given.

ASA	SAS	SSS