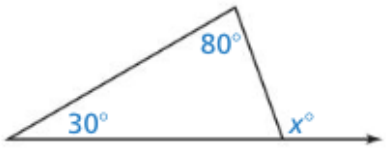
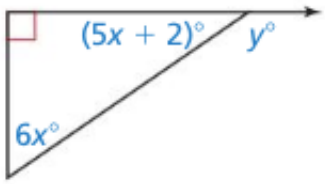
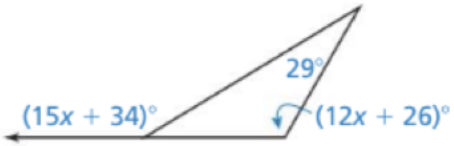
Name: Date: Hour:

Geometry 9
WS PC #1 Review – Unit 5

Find the measure of the exterior angle.

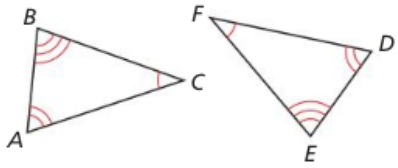
1. 

2. 

3. 

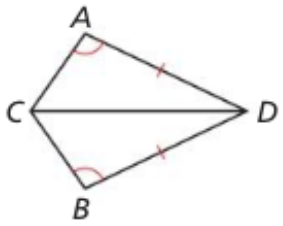
Identify all pairs of congruent corresponding parts. Then write another congruence statement for the polygons.

4. $\triangle ABC \cong \triangle DEF$

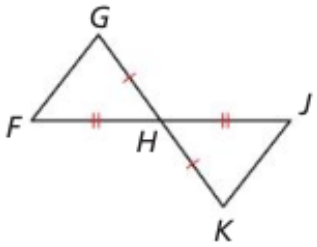


Decide whether enough information is given to prove that the triangles are congruent using the SAS congruence theorem. If so, write a proof. If not, explain why.

5. $\Delta CAD, \Delta CBD$

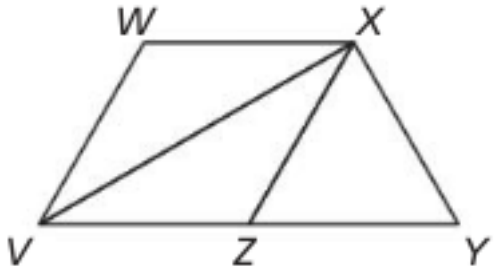


6. $\Delta GHF,\ \Delta KHJ$



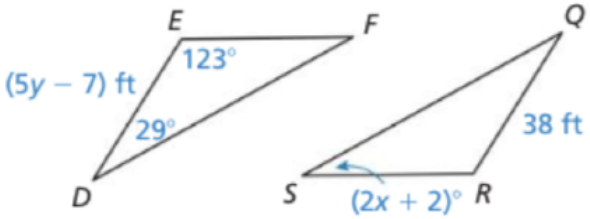
Copy and complete the statement. State which theorem you used.

7. If $VW \cong WX$, then ∠_____ ≅ ∠_____.
8. If $XZ \cong XY$, then ∠_____ ≅ ∠_____.
9. If $\angle ZVX \cong \angle ZXV$, then _____ ≅ _____.
10. If $\angle XYZ \cong \angle ZXY$, then _____ ≅ _____.

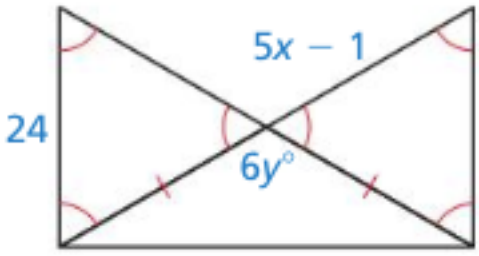


Find the value of x and y.

11. $\Delta DEF \cong \Delta QRS$



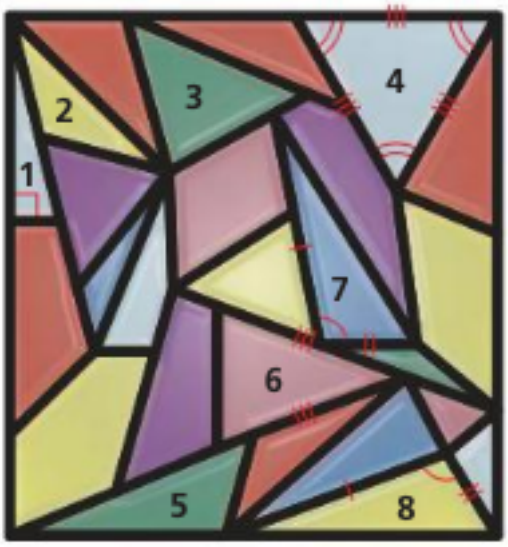
12.



13. In a right triangle, the measure of one acute angle is 4 times the difference of the measure of the other acute angle and 5. Find the measure of each acute angle in the triangle.

14. The figure shows a stained glass window.

a. Classify triangles 1 – 4 by their angles.



b. Classify triangles 4 – 6 by their sides.

c. Is there enough information to prove $\Delta 7 \cong \Delta 8$? If so, label the vertices and write a proof. If not, determine what additional information is needed.