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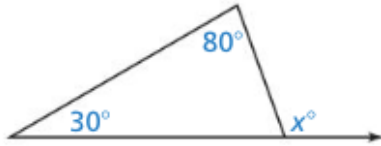
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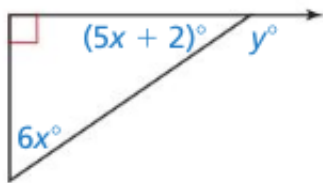
Advanced Geometry  
WS PC #1 Review – Unit 5

Find the measure of the exterior angle.

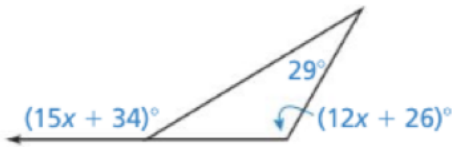
1.



2.

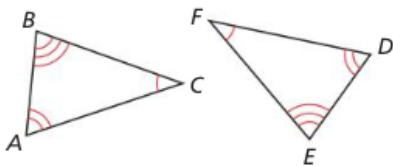


3.



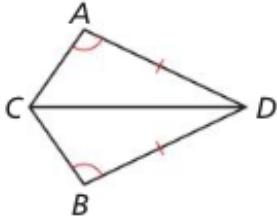
Identify all pairs of congruent corresponding parts. Then write another congruence statement for the polygons.

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

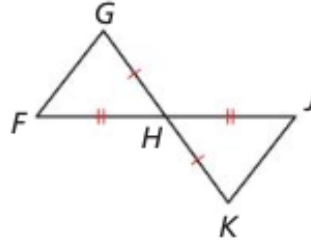


Decide whether enough information is given to prove that the triangles are congruent using the SAS congruence theorem. If so, write a proof. If not, explain why.

5.  $\triangle CAD, \triangle CBD$



6.  $\triangle GHF, \triangle KHJ$



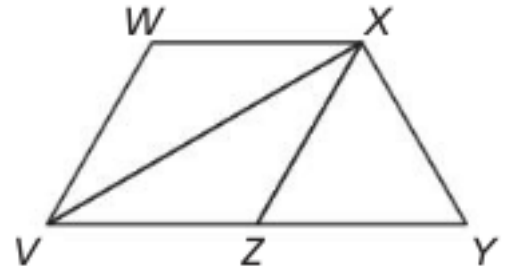
Copy and complete the statement. State which theorem you used.

7. If  $VW \cong WX$ , then  $\angle \_\_\_\_ \cong \angle \_\_\_\_$ .

8. If  $XZ \cong XY$ , then  $\angle \_\_\_\_ \cong \angle \_\_\_\_$ .

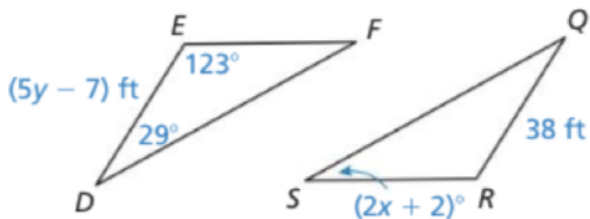
9. If  $\angle ZVX \cong \angle ZXV$ , then  $\_\_\_\_ \cong \_\_\_\_$ .

10. If  $\angle XYZ \cong \angle ZXY$ , then  $\_\_\_\_ \cong \_\_\_\_$ .

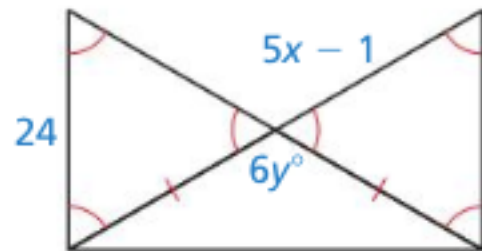


Find the value of  $x$  and  $y$ .

11.  $\triangle DEF \cong \triangle QRS$

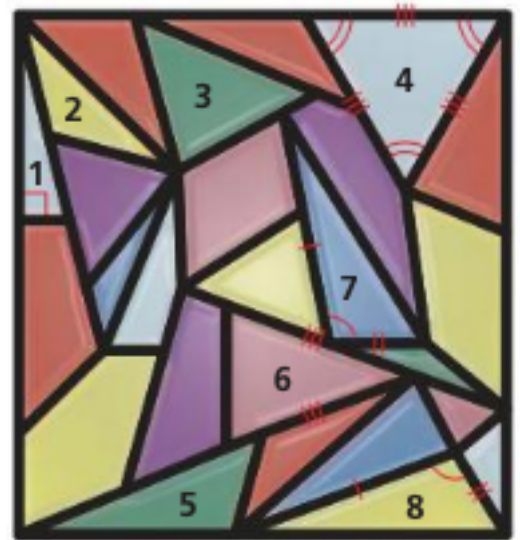


12.



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.
- Classify triangles 1 – 4 by their angles.
  - Classify triangles 4 – 6 by their sides.



- 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.