

Chapter 5 Group Review

Fill in the blanks with the appropriate vocab term:

- 0.2
1. A name given to matching angles of congruent triangles is _____.
 2. A side that is between two angles is called a(n) _____.
 3. The two congruent angles in an isosceles triangle are called _____.
 4. The two congruent sides in an isosceles triangle are called _____.

What can you conclude from the given statement? Provide a reason why.

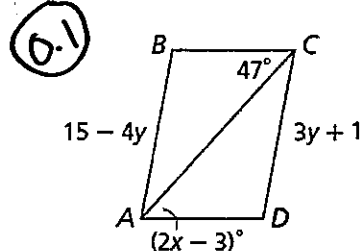
- 0.3
5. $\overline{CB}$ bisects $\angle ACD$, so _____ $\cong$ _____ because _____.
 6. $\overline{XY}$ bisects $\overline{ZW}$ at point A, so _____ $\cong$ _____ because _____.
 7. $\angle 1 \cong \angle 2$ so _____ $\parallel$ _____ because _____.

- 0.1
8. Given: $\triangle PQR \cong \triangle XYZ$. Identify the congruent corresponding parts.

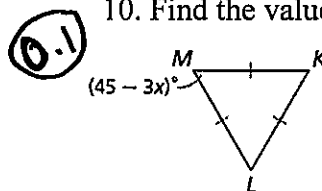
a. $\overline{PR} \cong$ _____

b. $\angle RPQ \cong \angle$ _____

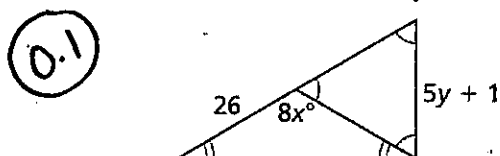
9. Given: $\triangle ABC \cong \triangle CDA$. Find x and y.



10. Find the value of x.



11. Find the values of x and y in the diagram.



12. A rectangle has vertices at (0, 0), (2k, 0), and (0, k). Find the coordinates of the 4th vertex.

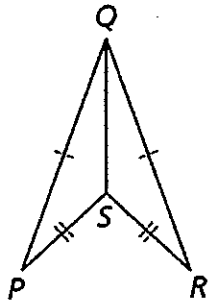
- 0.1
13. Place an isosceles triangle in the coordinate plane in a way that is convenient for finding side lengths. Assign coordinates (as variables!) to each vertex.
- 0.1

14. Write a two-column proof.

0.3

Given: $\overline{PQ} \cong \overline{RQ}$,
 $\overline{PS} \cong \overline{RS}$

Prove: $\overline{QS}$ bisects $\angle PQR$.



Statements

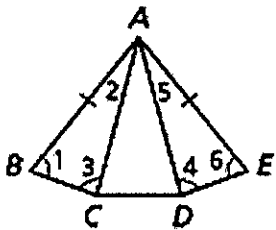
Reasons

15. Write a two-column proof.

0.3

Given: $\angle 1 \cong \angle 6$, $\angle 4 \cong \angle 6$
 $\angle 1 \cong \angle 3$, $\overline{AB} \cong \overline{AE}$

Prove: $\triangle ACD$ is isosceles.



Statements

Reasons

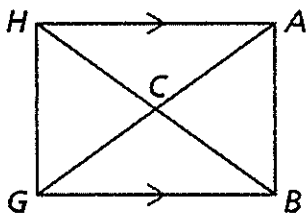
16. Write a two-column proof.

0.3

Given: C is the midpoint
of $\overline{AG}$.

$\overline{HA} \parallel \overline{GB}$

Prove: $\triangle HAC \cong \triangle BGC$



Statements

Reasons