Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_

1. Find the distance between the following coordinates: $(3, -1)$ and $(-2, 5)$.
2. Given J(-4, 6) and *K* (2, -2). Find the points that partition line segment in a ratio of 3:1.
3. How would number 2 have been different if it was a directed line segment?
4. Given line AC is three times as long as BC solve for X. AC=60 BC=5x-5

A

B

C

1. For the following diagrams. Set up an equation to solve for x. Write a justification for your equation.

A.

B.

C.

D.

35°

57°

4x+62°

6x+30°

4x+30°

6x+20°

1. For each right triangle, find the length of the side that is not given.

10

12

16 m

13 in.

1. Write a rule for the following transformations and explain how you know the two shapes are congruent.

A. Transformation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ B. Transformation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Rule: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Rule: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Congruent: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Congruent: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Perform the following transformations:

A.

B.

7. Draw a sketch of the coordinate plane and label the four quadrants.