**3-69.** On graph paper, plot *ABCD* if *A*(0, 3), *B*(2, 5), *C*(6, 3), and *D*(4, 1).

1. Rotate *ABCD* 90° clockwise () about the origin to form *A′B′C′D′*. Name the coordinates of *B′.*
2. Translate *A′B′C′D′* up 8 units and left 7 units to form *A″B″C″D″.* Name the coordinates of *C″.*
3. After rotating *ABCD* 180° to form *A′″B′″C′″D′″*, Arah noticed that *A′″B′″C′″D′″* position and orientation was the same as *ABCD.* What was the point of rotation? How did you find it?

**3-70.** Use the relationships in each diagram below to solve for *x.* **Justify** your solution by stating which geometry relationships you used.

1. 
2. 
3. 

**3-72.** Explain how you know that the shapes below are similar.



**3-89.** Determine which similarity conjectures (AA ∼, SSS ∼, or SAS ∼) could be used to establish that the following pairs of triangles are similar. List as many as you can.

1. 
2. 
3. 

**3-91.** On graph paper, sketch a rectangle with side lengths of 15 units and 9 units. Shrink the rectangle by a zoom factor of . Make a table showing the area and perimeter of both rectangles.