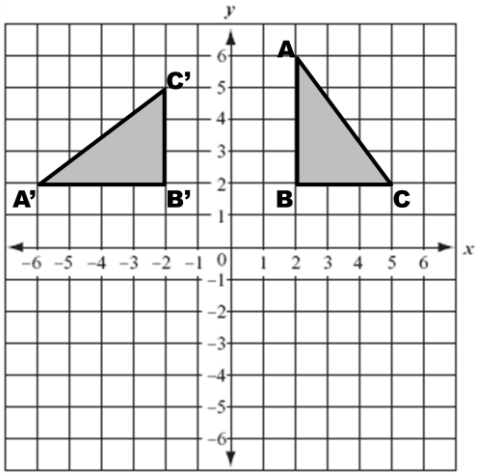
Rotations on the Coordinate Plane Notes

Name_____

Rotation: a transformation performed by "spinning" the figure around a fixed point (known as the center of rotation). Since the new image and the original image are congruent, it is considered a **rigid transformation**.

Examples:

1) How has the object been rotated around the origin?



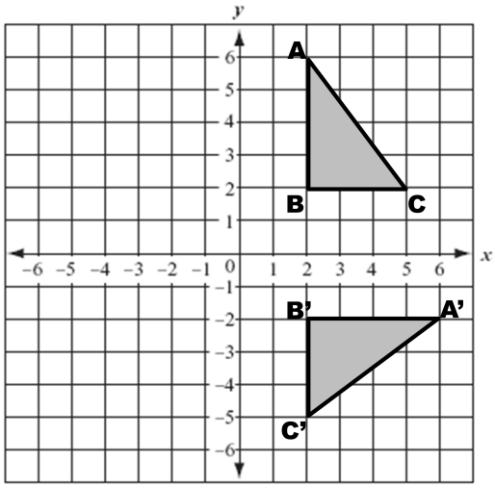
A(2, 6)

B(2, 2)

C(5, 2)

How do the new ordered pairs relate to the original ordered pairs?

2) How has the object been rotated around the origin?



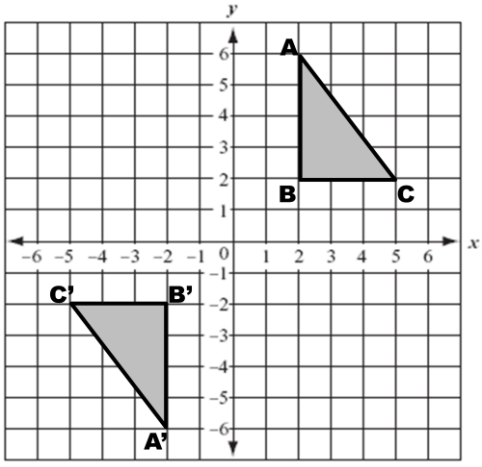
A(2, 6)

B(2, 2)

C(5, 2)

How do the new ordered pairs relate to the original ordered pairs?

3) How has the object been rotated around the origin?



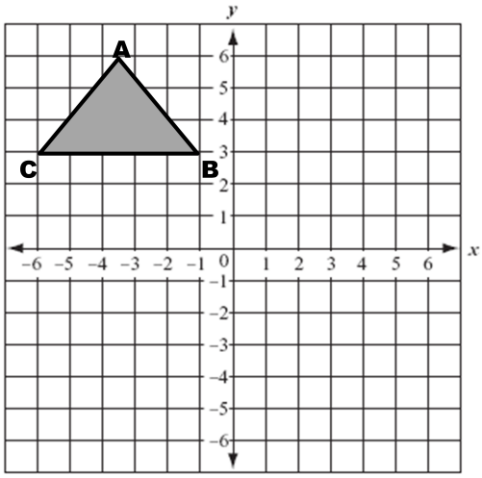
A(2, 6)

B(2, 2)

C(5, 2)

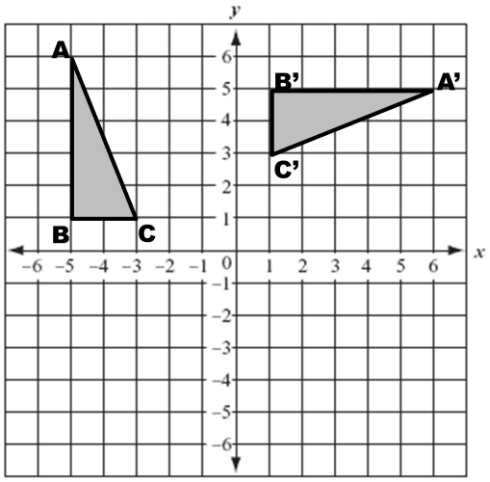
How do the new ordered pairs relate to the original ordered pairs?

4) Rotate the object 90° counterclockwise around the origin. What are the new coordinates?



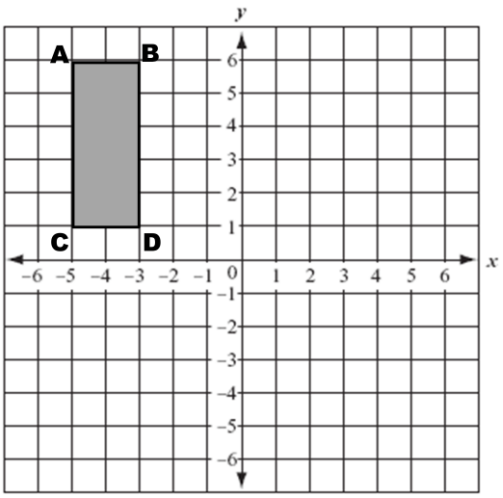
Pause the video and try the ones on the back on your own!
Then press play and check your answers with a color pen.

1) How has the object been rotated around the origin?

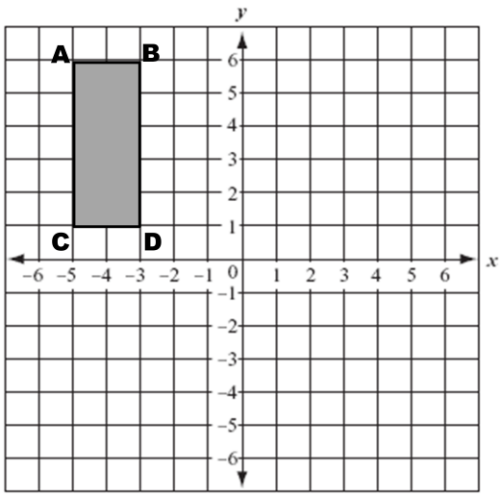


How do the new ordered pairs relate to the original ordered pairs?

2) Rotate the object 90° counterclockwise around the origin. What are the new coordinates?



3) Rotate the object 180° counterclockwise around the origin. What are the new coordinates?



4) Rotate the object 90° clockwise around the origin. What are the new coordinates?