

NAME _____

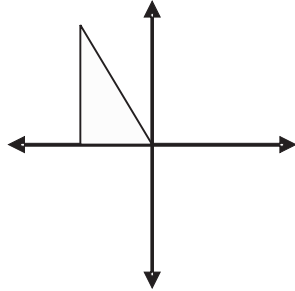
Module 11 Transformation of Shapes
Lesson 2 Rotations

Independent Practice

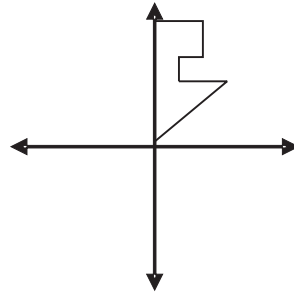
11.2

Using the origin as the center of rotation, rotate the figure counterclockwise the given number of degrees.

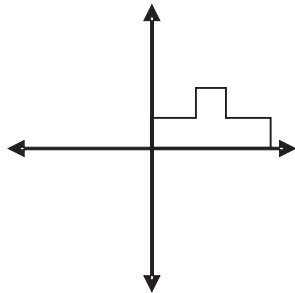
1. 90°



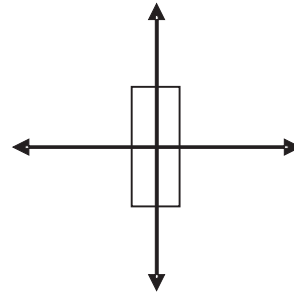
2. 180°



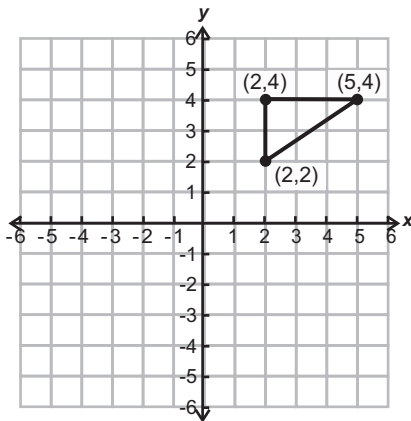
3. 270°



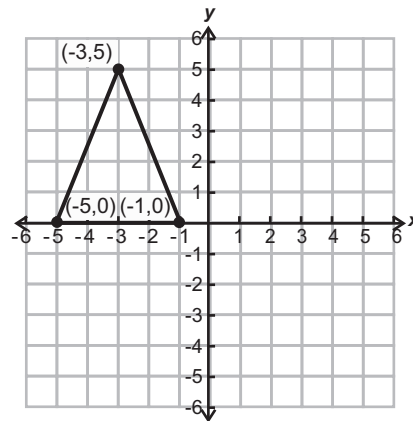
4. 90°



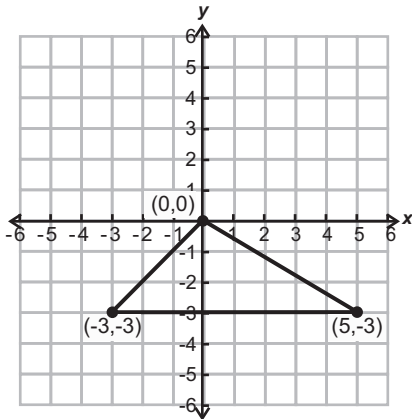
5. 270°



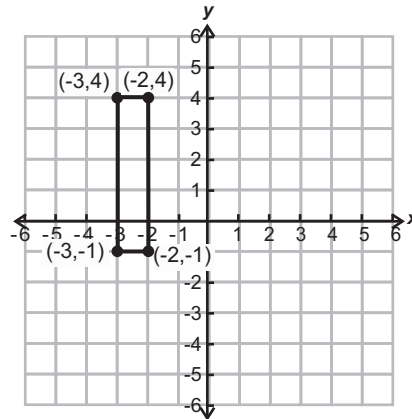
6. 180°



7. 90°

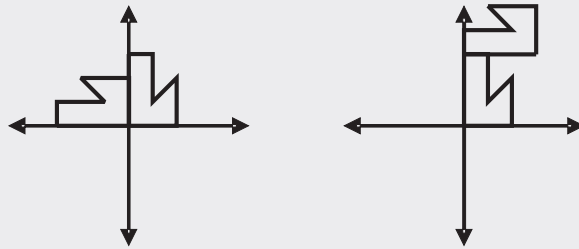


8. 90°



Journal

1. How is a rotation like a translation? How is it different?
2. Consider the point located at $(4, 8)$. Explain how you know what the vertices will be when the point is rotated 90° , 180° , and 270° counterclockwise about the origin.
3. How are the two rotations below the same? How are they different?

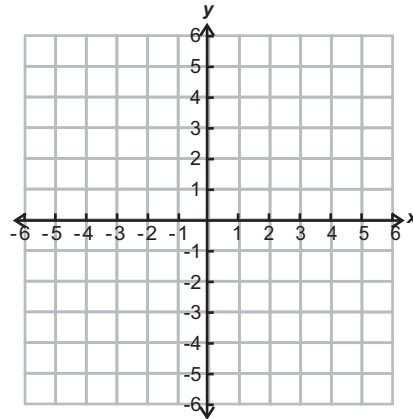


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Cumulative Review

1. Graph the line segment whose endpoints are $(-4, -1)$ and $(3, -4)$. Find the length of the segment to the nearest tenth of a unit.

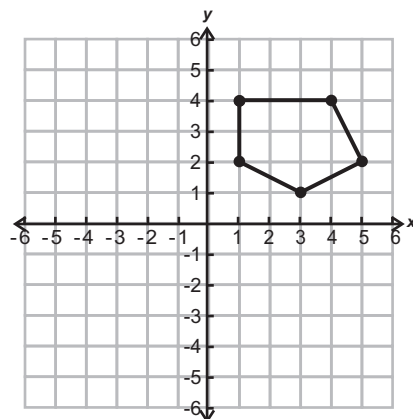


2. Find the slope of the line segment in Problem 1.

3. What is distance between points A and B on a number line if the coordinate of A is -14 and the coordinate of B is 29 ?

4. A quadrilateral with vertices at $(-4, 5)$, $(2, 1)$, $(0, -6)$, and $(-4, 0)$ is translated five units right and three units down. What are the coordinates of the translated vertices?

5. Reflect the figure across the x -axis. List the vertices of the reflected figure.



Additional Work Area