

## Middle and High School: Coordinate Plane Assessment Key

1. The coordinate plane is made up of \_\_\_\_ axes
  - a. 3
  - b. 2**
  - c. 1
  - d. 4

Correct feedback: Yes, the coordinate plane is made up of two axes

Incorrect feedback: Nice try! The coordinate plane is made up of two axes. Please review the graphing in the coordinate plane PowerPoint.

2. In an ordered pair, the first number is the
  - a. X-coordinate**
  - b. Y-coordinate
  - c. origin
  - d. vertex

Correct feedback: Yes, the first number of an ordered pair is the x-coordinate

Incorrect feedback: Sorry, the first number of an ordered pair is the x-coordinate. Please review the graphing in the coordinate plane PowerPoint.

3. When a figure is flipped over a line to create a mirror image, it is called a
  - a. translation
  - b. rotation
  - c. plane figure
  - d. reflection**

Correct feedback: Yes! A figure flipped over a line to create a mirror image, it is called a reflection

Incorrect feedback: Sorry, a figure flipped over a line to create a mirror image, it is called a reflection. Please review the reflections in the coordinate plane PowerPoint

4. When a figure is slid across a line without turning, it is called?
  - a. translation**
  - b. rotation
  - c. plane figure
  - d. reflection

Correct feedback: Yes, when a figure is slid across a line without turning it is called a translation.

Incorrect feedback: Sorry, when a figure is slid across a line without turning it is called a translation. Please review the translations in the coordinate plane PowerPoint.

5. When a figure is turned around a vertex, it is called?
- translation
  - rotation
  - plane figure
  - reflection

Correct feedback: Yes, when a figure is turned around a vertex, it is called a rotation.

Incorrect feedback: Sorry, when a figure is turned around a vertex, it is called a rotation. Please review the rotation in the coordinate plane PowerPoint.

6. What are the coordinates for a triangle with the coordinates A(-2, 4), B(0, 2), and C(-2, 1) when it is translated two units to the right and 3 units down?
- A(-4, 4), B(-2, 2), and C(-4, 1)
  - A(-1, 4), B(2, 2), and C(0, 1)
  - A(-2, 1), B(0, -1), and C(-2, -2)
  - A(-1, 1), B(2, -1), and C(0, -2)

Correct feedback: Yes, the answer is A(-1, 1), B(2, -1), and C(0, -2)

Incorrect feedback: Sorry, the A(-1, 1), B(2, -1), and C(0, -2). Please review the translations in the coordinate plane PowerPoint.

7. What are the coordinates for a quadrilateral with the coordinates A(2,4), B(4,4), C(4,1), and D (1,1) after it is reflected across the x-axis?
- A(-4, 4), B(-2, 2), C(-4, 1), and D (4,2)
  - A(-3, 4), B(-2, 3), C(-4, 1), and D (5,4)
  - A(2,-4), B(4, -4), C(4, -1), and D (1,-1)
  - A(-1, 4), B(-4, 2), C(-4, 1), and D (3,-1)

Correct feedback: Yes, the answer is A(2,-4), B(4, -4), C(4, -1), and D (1,-1).

Incorrect feedback: Sorry, the answer is A(2,-4), B(4, -4), C(4, -1), and D (1,-1). Please review the reflections PowerPoint.

8. What are the coordinates for a triangle with the coordinates A(-4, 3), B(-1, 1), and C(-4, 1) when it is rotated 90° clockwise around the origin?
- A(3, 4), B(1,1), and C(1,4)
  - A(-1, 4), B(2, 2), and C(0, 1)
  - A(-3, 1), B(1, -1), and C(1, -2)
  - A(-1, 4), B(2, -1), and C(0, 4)

Correct feedback: Yes, the answer is A(3, 4), B(1,1), and C(1,4)

Incorrect feedback: Sorry the answer is A(3, 4), B(1,1), and C(1,4). Please review the rotations PowerPoint.

9. When a figure is rotated 180° around the origin, to find the new coordinates you should
- Multiply x-coordinates by -1

- b. Multiply y-coordinates by -1
- c. Multiply both coordinates by -1
- d. None of the above

Correct feedback: Yes! The answer is Multiply both coordinates by -1

Incorrect feedback: Sorry! The answer is Multiply both coordinates by -1. Please review the rotations PowerPoint

10. A right angle is formed by
- a. Two parallel lines
  - b. Two perpendicular lines
  - c. Two line segments
  - d. All of the above

Correct feedback: Yes, a right angle is formed by two perpendicular lines.

Incorrect feedback: Sorry, a right angle is formed by two perpendicular lines. Please review the vocabulary for this module.