_____ Period: _____ Date: ____

Polygons in the Coordinate Plane Exit Quiz

Part A Instructions: Choose the option that completes the sentence or answers the question.

1. The distance between two points (x_1, y_1) and (x_2, y_2) is:

a.
$$\sqrt{(x_2 - x_1)^2 - (y_2 - y_1)^2}$$

b. $\sqrt{(x_2 + x_1)^2 + (y_2 + y_1)^2}$
c. $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

b.
$$\sqrt{(x_2 + x_1)^2 + (y_2 + y_1)^2}$$

c.
$$\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$$

- 2. The slope of a line given its points is:

a.
$$m = \frac{y_2 - y_1}{y_2 - y_1}$$

a.
$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

b. $m = \frac{y_2 + y_1}{x_2 + x_1}$

c.
$$m = \frac{x_2 + x_1}{x_2 - x_1}$$

- d. None
- 3. A quadrilateral is a rectangle if:
 - a. The diagonals are perpendicular
 - b. The diagonals are congruent
 - c. The opposite sides are congruent
 - d. Both b and c
- 4. A triangle is an equilateral triangle if:
 - a. All sides are of different lengths
 - b. All sides are of same length
 - c. All angles are of same measure
 - d. Both b and c

Part B Instructions: Answer the question below.

5. Classify the quadrilateral represented by the vertices A(-5, 1), B(-3, 5), C(-3, 1), D(-1, 3).

1

Polygons in the Coordinate Plane Exit Quiz

Answers

Part A Instructions: Choose the option that completes the sentence or answers the question.

- 1. The distance between two points (x_1, y_1) and (x_2, y_2) is:

 - a. $\sqrt{(x_2 x_1)^2 (y_2 y_1)^2}$ b. $\sqrt{(x_2 + x_1)^2 + (y_2 + y_1)^2}$
 - c. $\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$
 - d. None
- 2. The slope of a line given its points is:
 - a. $m = \frac{y_2 y_1}{x}$
 - b. $m = \frac{y_2 + y_1}{y_1}$

 - d. None
- 3. A quadrilateral is a rectangle if:
 - a. The diagonals are perpendicular
 - b. The diagonals are congruent
 - c. The opposite sides are congruent
 - d. Both b and c
- 4. A triangle is an equilateral triangle if:
 - a. All sides are of different lengths
 - b. All sides are of same length
 - c. All angles are of same measure
 - d. Both b and c

Part B Instructions: Answer the question below.

5. Classify the quadrilateral represented by the vertices A(-5, 1), B(-3, 5), C(-3, 1), D(-1, 3).

Square