

Grade 6 · The Coordinate Plane · Test

Common Core 6.NS.C.6b, 6.NS.C.6c, 6.NS.C.8, 6.G.A.3 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

This 45-minute test covers the coordinate plane from Common Core 6.NS.C.6b, 6.NS.C.6c, 6.NS.C.8, and 6.G.A.3. It has 8 questions worth 20 points in total. Show your work, label plotted points, and use absolute value to explain distances.

Test information

- **Grade:** Grade 6
- **Chapter:** The Coordinate Plane
- **Common Core:** 6.NS.C.6b, 6.NS.C.6c, 6.NS.C.8, 6.G.A.3
- **Time:** 45 minutes
- **Total:** 20 points (Question 1: 2 pts; Question 2: 2 pts; Question 3: 3 pts; Question 4: 2 pts; Question 5: 2 pts; Question 6: 3 pts; Question 7: 3 pts; Question 8: 3 pts)

Question 1: Name the quadrant (2 points)

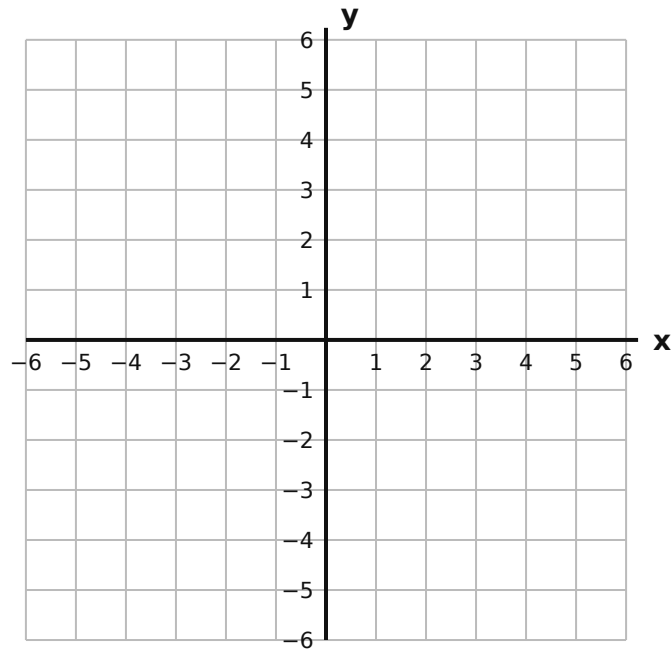
Name the quadrant of each point.

- $(-8, 3)$ (1 point)
- $(5, -6)$ (1 point)

Question 2: Plot points (2 points)

Plot and label each point on the grid.

- $A(3, -4)$ (1 point)
- $B(-5, -2)$ (1 point)

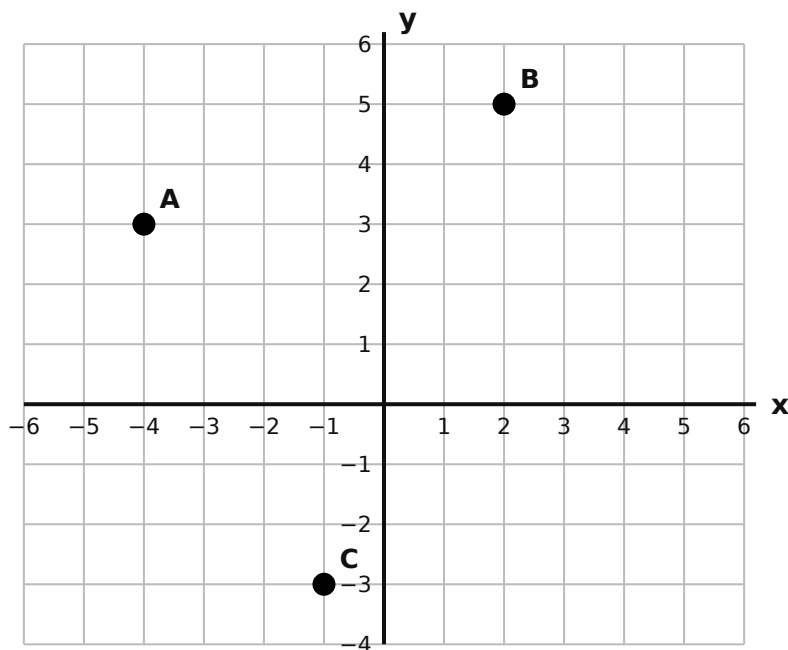


Grid for plotting.

Question 3: Read ordered pairs (3 points)

Write the ordered pair for each labeled point.

- a. Point A (1 point)
- b. Point B (1 point)
- c. Point C (1 point)



Points A, B and C.

Question 4: Reflect a point (2 points)

The point $(-3,7)$ is reflected.

- Write the coordinates of its reflection across the x -axis. (1 point)
- Write the coordinates of its reflection across the y -axis. (1 point)

Question 5: Distance between points (2 points)

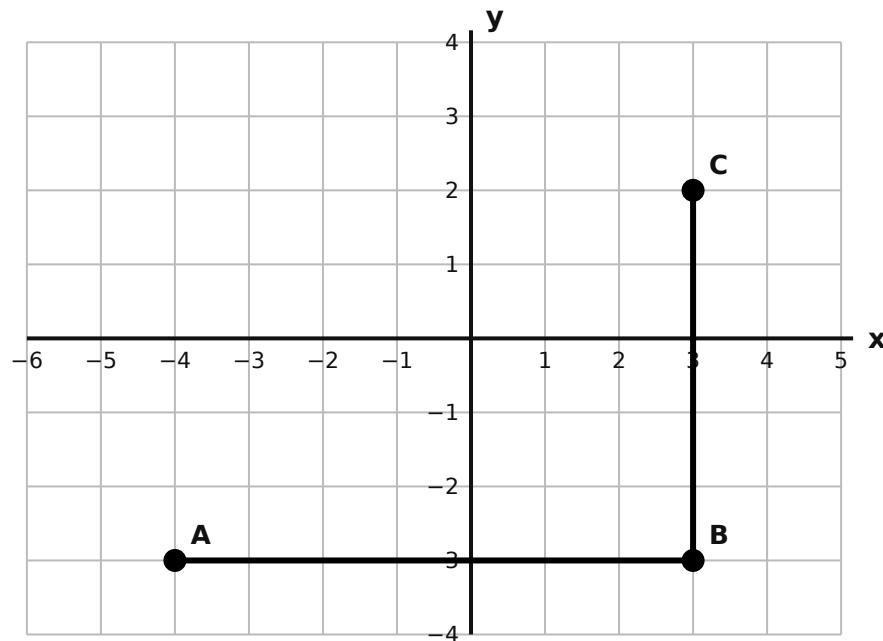
Find the distance between each pair of points.

- $(-5,-2)$ and $(-5,6)$ (1 point)
- $(9,4)$ and $(-3,4)$ (1 point)

Question 6: Rectangle on the plane (3 points)

Three vertices of rectangle $ABCD$ are $A(-4,-3)$, $B(3,-3)$, and $C(3,2)$.

- Find the coordinates of D . (1 point)
- Find the lengths of AB and BC . (1 point)
- Find the perimeter of the rectangle. (1 point)

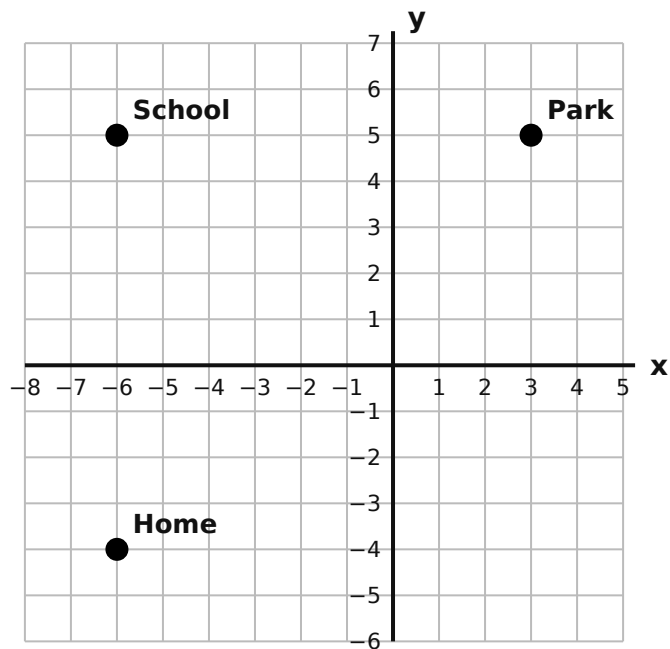


Three vertices of rectangle $ABCD$.

Question 7: Walking route (3 points)

On a city map, each unit is one block. Ethan walks from home $H(-6,-4)$ straight north to school $S(-6,5)$, and then straight east to the park $P(3,5)$.

- a. Find the distance from home to school. (1 point)
- b. Find the distance from school to the park. (1 point)
- c. Find the total distance Ethan walks. (1 point)



City map; each unit is one block.

Question 8: Find the error (3 points)

Jamal says the distance between $A(-3,2)$ and $B(5,2)$ is 2 units, because $5-3=2$. Explain his mistake and find the correct distance.