

Unit 6: Coordinate Geometry

PRACTICE · SET 2

Name: _____

Date: _____

Show your work where needed and write each final answer exactly as requested (a number, fraction, or coordinate pair). Use plain-text notation.

1. Find the distance between the points (1, 2) and (4, 6).

Answer: _____

2. Find the distance from the origin (0, 0) to the point (-6, 8).

Answer: _____

3. Find the midpoint of the segment joining (-3, 5) and (7, -1). Give your answer as a coordinate pair.

Answer: _____

4. Find the slope of the line passing through the points (2, 3) and (6, 11).

Answer: _____

5. Find the slope of the line passing through the points (-1, 4) and (3, -2). Give your answer as a fraction if needed.

Answer: _____

6. A circle has equation $(x - 3)^2 + (y + 2)^2 = 16$. Find its center as a coordinate pair.

Answer: _____

7. A circle has equation $(x + 1)^2 + (y - 5)^2 = 49$. Find its radius.

Answer: _____

8. Find the vertex of the parabola $y = (x - 2)^2 + 5$. Give your answer as a coordinate pair.

Answer: _____

9. Find the vertex of the parabola $y = x^2 - 6x + 11$. Give your answer as a coordinate pair.

Answer: _____

10. Reflect the point (4, -7) across the x-axis. Give the image as a coordinate pair.

Answer: _____

11. Rotate the point (3, 4) by 90° counterclockwise about the origin. Give the image as a coordinate pair.

Answer: _____

12. Translate the point (-2, 6) by 5 units right and 3 units down. Give the image as a coordinate pair.

Answer: _____