

Unit 6: Coordinate Geometry

CONCEPT

Name: _____ Date: _____

Solve each problem and write your exact answer on the line. Show your work on scratch paper.

1. Find the distance between the points (0, 0) and (3, 4).

Answer: _____

2. Find the midpoint of the segment with endpoints (2, 4) and (6, 8). Give your answer as a coordinate pair.

Answer: _____

3. Find the slope of the line through the points (1, 2) and (3, 8).

Answer: _____

4. Find the distance between the points (1, 2) and (1, 7).

Answer: _____

5. A circle has center (0, 0) and radius 6. What is the value of r^2 in its equation $x^2 + y^2 = r^2$?

Answer: _____

6. Find the midpoint of the segment with endpoints (0, 0) and (10, 4). Give your answer as a coordinate pair.

Answer: _____

7. Find the slope of the line through the points (0, 1) and (4, 1).

Answer: _____

8. The equation of a circle is $(x - 3)^2 + (y - 5)^2 = 16$. What is the radius?

Answer: _____

9. Find the distance between the points (2, 3) and (5, 3).

Answer: _____

10. The point (2, 5) is translated 3 units right and 4 units up. What are the coordinates of its image? Give your answer as a coordinate pair.

Answer: _____

11. The equation of a circle is $(x - 1)^2 + (y + 2)^2 = 25$. What are the coordinates of its center? Give your answer as a coordinate pair.

Answer: _____

12. The point (4, 7) is reflected across the x-axis. What are the coordinates of its image? Give your answer as a coordinate pair.

Answer: _____