

Unit 7: Shapes on the Coordinate Grid

PRACTICE

Name: _____ Date: _____

Solve each problem and write your short answer on the line. Use plain-text notation (for example, coordinate pairs like $(3, -4)$).

1. Point A is at $(4, 7)$. Point B is 5 units directly to the left of A on the same horizontal line. What are the coordinates of point B?

Answer: _____

3. A line segment has endpoints $(2, 3)$ and $(2, 9)$. What is the length of this segment in units?

Answer: _____

5. A rectangle has vertices at $(1, 1)$, $(8, 1)$, $(8, 5)$, and $(1, 5)$. What is its perimeter in units?

Answer: _____

7. A triangle has side lengths 5 cm, 5 cm, and 8 cm. Is this triangle isosceles? Answer yes or no.

Answer: _____

9. A quadrilateral has all four sides equal in length and four right angles. It is being classified in the hierarchy. Is this shape a square? Answer yes or no.

Answer: _____

11. A rectangle has vertices at $(0, 0)$, $(10, 0)$, $(10, 6)$, and $(0, 6)$. What is its area in square units?

Answer: _____

2. Point P is at $(-3, 2)$. Point Q is 6 units directly above P on the same vertical line. What are the coordinates of point Q?

Answer: _____

4. A line segment has endpoints $(-5, 4)$ and $(7, 4)$. What is the length of this segment in units?

Answer: _____

6. A square has three vertices at $(2, 2)$, $(6, 2)$, and $(6, 6)$. What are the coordinates of the fourth vertex?

Answer: _____

8. A triangle has side lengths 7 cm, 7 cm, and 7 cm. Every square is a rectangle. Following the same kind of rule, how many equal sides does an equilateral triangle have?

Answer: _____

10. A parallelogram has four right angles but its sides are 3 cm and 8 cm (not all equal). Is this shape a square? Answer yes or no.

Answer: _____

12. The point $(-6, -5)$ is reflected across the y-axis (its x-coordinate changes sign). What are the coordinates of the reflected point?

Answer: _____