

Unit 1: Constructions and Rigid Transformations

CONCEPT

Name: _____ Date: _____

Find the image point (or answer) for each transformation. Write coordinates as ordered pairs like (3, -4).

1. Reflect the point (3, 5) over the x-axis. What are the coordinates of its image?

Answer: _____

2. Reflect the point (4, 2) over the y-axis. What are the coordinates of its image?

Answer: _____

3. Translate the point (2, 1) by moving 3 units right and 4 units up. What are the coordinates of its image?

Answer: _____

4. Translate the point (-1, 6) by moving 5 units right. What are the coordinates of its image?

Answer: _____

5. Rotate the point (2, 3) by 90° counterclockwise about the origin. What are the coordinates of its image?

Answer: _____

6. Rotate the point (5, -2) by 180° about the origin. What are the coordinates of its image?

Answer: _____

7. Reflect the point (-3, 7) over the y-axis. What are the coordinates of its image?

Answer: _____

8. Rotate the point (4, 1) by 90° clockwise about the origin. What are the coordinates of its image?

Answer: _____

9. Translate the point (7, 8) by moving 2 units left and 3 units down. What are the coordinates of its image?

Answer: _____

10. Reflect the point (-6, -1) over the x-axis. What are the coordinates of its image?

Answer: _____

11. A translation moves the point (1, 1) to the point (4, 5). Under this same translation, what is the image of the point (0, 0)?

Answer: _____

12. A perpendicular bisector is constructed for the segment with endpoints (2, 4) and (6, 8). At what point does it cross the segment (the midpoint)?

Answer: _____