10-1

Practice

Introduction to Analytic Geometry

Find the distance between each pair of points with the given coordinates. Then find the midpoint of the segment that has endpoints at the given coordinates.

1. $(-2, 1), (3, 4)$

2. $(1, 1), (9, 7)$

3. $(3, -4), (5, 2)$

4. $(-1, 2), (5, 4)$

5. $(-7, -4), (2, 8)$

6. $(-4, 10), (4, -5)$

Determine whether the quadrilateral having vertices with the given coordinates is a parallelogram.

7. $(4, 4), (2, -2), (-5, -1), (-3, 5)$

8. $(3, 5), (-1, 1), (-6, 2), (-3, 7)$

9. $(4, -1), (2, -5), (-3, -3), (-1, 1)$

10. $(2, 6), (1, 2), (-4, 4), (-3, 9)$

11. ***Hiking*** Jenna and Maria are hiking to a campsite located at (2, 1) on a map grid, where each side of a square represents 2.5 miles. If they start their hike at (−3, 1), how far must they hike to reach the campsite?