# Distance Formula

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

# Midpoint Formula

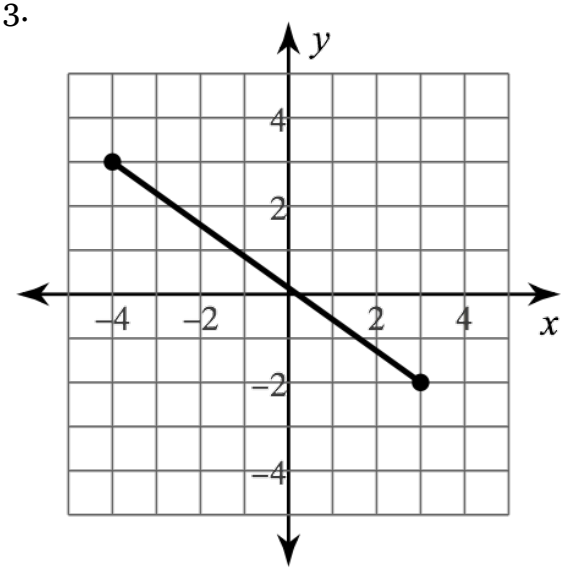
$$M = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$$

**Find the distance between each pair of points.**

1. (-8, -4) & (2, -9)

2. (-11, -12) & (-4, 12)

3.




**Find the midpoint of the line segment with the given endpoints.**

4. (3, 8) & (5, -10)

5. (1, -3) & (-5, 2)

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

6. Endpoint: (9, 7), midpoint: (-3, -2)

7. Endpoint: (-6, 4), midpoint: (-5, 1)

# Distance Formula

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

# Midpoint Formula

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**Find the distance between each pair of points.**

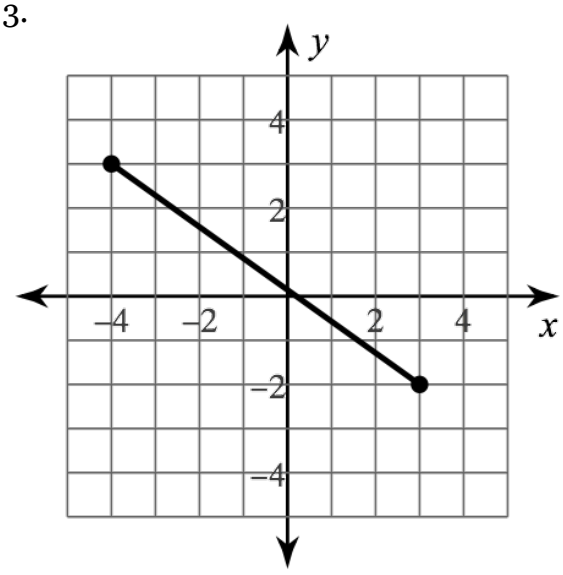
1. (-8, -4) & (2, -9)

$\sqrt{125}$

2. (-11, -12) & (-4, 12)

25

3.




$\sqrt{84}$

**Find the midpoint of the line segment with the given endpoints.**

4. (3, 8) & (5, -10)

$(4, -1)$

5. (1, -3) & (-5, 2)

$\left(-2, -\frac{1}{2}\right)$

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

6. Endpoint: (9, 7), midpoint: (-3, -2)

$(-15, -11)$

7. Endpoint: (-6, 4), midpoint: (-5, 1)

$(-4, -2)$