

Midpoint Formula

ES1

Example: Find the midpoint of the line segment with the endpoints (4, 1) and (2, -5).

$$\begin{aligned}\text{Midpoint} &= \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right) = \left(\frac{4 + 2}{2}, \frac{1 + (-5)}{2} \right) \\ &= (3, -2)\end{aligned}$$

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

1) (5, 0), (1, 4)

2) (-9, 3), (7, -8)

3) (-2, 9), (-7, 7)

4) (5, 10), (-3, 6)

5) (-1, -6), (3, 0)

6) (8, 1), (-2, -5)

7) (-6, -10), (-2, -8)

8) (4, -1), (-5, 9)

9) (2, 3), (4, -7)

10) (-9, -4), (-3, 6)
