



Midpoint Formula

Name _____

Score _____

MP:10

Example : Find the midpoint of a line segment with the endpoints (7, -8) and (-3, 4).

$$\begin{aligned}\text{Midpoint} &= \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right) \quad x_1 = 7 ; x_2 = -3 ; y_1 = -8 ; y_2 = 4 \\ &= \left(\frac{7 - 3}{2}, \frac{-8 + 4}{2} \right) \\ &= (2, -2)\end{aligned}$$

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

1) (-3, 7) and (9, 5)

2) (1, -2) and (4, -2)

3) (-10, -6) and (-8, 2)

4) (-5, 1) and (1, -4)

5) (3, -3) and (-7, -7)

6) (0, 8) and (10, 0)



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Answer key

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

1) (-3, 7) and (9, 5)

(3, 6)

2) (1, -2) and (4, -2)

$\left(\frac{5}{2}, -2\right)$

3) (-10, -6) and (-8, 2)

(-9, -2)

4) (-5, 1) and (1, -4)

$\left(-2, -\frac{3}{2}\right)$

5) (3, -3) and (-7, -7)

(-2, -5)

6) (0, 8) and (10, 0)

(5, 4)