



Midpoint Formula

Name _____

Score _____

MP:13

Example : Find the midpoint of a line segment with the endpoints (1.5, -2) and (-0.3, 4).

$$\begin{aligned}\text{Midpoint} &= \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right) \quad x_1 = 1.5 ; x_2 = -0.3 ; y_1 = -2 ; y_2 = 4 \\ &= \left(\frac{1.5 - 0.3}{2}, \frac{-2 + 4}{2} \right) \\ &= (0.6, 1)\end{aligned}$$

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

1) $\left(0, \frac{1}{2}\right)$ and $\left(-4, \frac{3}{2}\right)$

2) $(-3.1, -7.3)$ and $(2, 7)$

3) $(-1, 3)$ and $(2.2, 5)$

4) $\left(-\frac{1}{5}, -\frac{5}{3}\right)$ and $\left(-\frac{9}{5}, -\frac{4}{3}\right)$

5) $\left(-\frac{1}{3}, -6\right)$ and $(-2, -8)$

6) $(5.6, -0.5)$ and $(-1.4, -1.5)$



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Answer key

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

1) $\left(0, \frac{1}{2}\right)$ and $\left(-4, \frac{3}{2}\right)$

$(-2, 1)$

2) $(-3.1, -7.3)$ and $(2, 7)$

$(-0.55, -0.15)$

3) $(-1, 3)$ and $(2.2, 5)$

$(0.6, 4)$

4) $\left(-\frac{1}{5}, -\frac{5}{3}\right)$ and $\left(-\frac{9}{5}, -\frac{4}{3}\right)$

$\left(-1, -\frac{3}{2}\right)$

5) $\left(-\frac{1}{3}, -6\right)$ and $(-2, -8)$

$\left(-\frac{7}{3}, -7\right)$

6) $(5.6, -0.5)$ and $(-1.4, -1.5)$

$(2.1, -1)$