Name : _____

Midpoint Formula

Example: Find the midpoint of the line segment with the endpoints (3, –2) and (–5, 4).

$$\textbf{Midpoint} = \left(\frac{\textbf{x}_1 + \textbf{x}_2}{\textbf{2}}, \frac{\textbf{y}_1 + \textbf{y}_2}{\textbf{2}} \right) = \left(\frac{3 - 5}{2}, \frac{-2 + 4}{2} \right)$$

$$= \ (\textbf{–1, 1})$$

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

1) (1, 2), (2, 3)

3) (–4, 5), (–10, 7)

5) $\left(-\frac{1}{7}, 8 \right)$, (–7, 2)

7) (5.4, –5), (11, –3)

9) (–3, –2), (–0.6, –4)

10) (5, –8), (–7, –10)