

Midpoints

- point in middle of line segment
- average of 2 coordinates

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

$$\underline{\text{EX}} \rightarrow 3, 7$$

$$\frac{3+7}{2} = \frac{10}{2} = \textcircled{5}$$

$$\underline{\text{EX}} \rightarrow 6, 12$$

$$\frac{6+12}{2} = \frac{18}{2} = \textcircled{9}$$

$$\underline{\text{EX}} \rightarrow (-10, 5), (10, 11)$$

$$\frac{-10+10}{2}, \frac{5+11}{2}$$

$$0, \frac{16}{2} \Rightarrow \textcircled{0, 8}$$

$$\underline{\text{EX}} \rightarrow (-4, 3), (7, 12)$$

$$\frac{-4+7}{2}, \frac{3+12}{2}$$

$$\textcircled{\frac{3}{2}, \frac{15}{2}}$$

$$\underline{\text{EX}} \rightarrow (-1, -1), (7, 11)$$

$$\frac{-1+7}{2}, \frac{-1+11}{2}$$

$$\frac{6}{2}, \frac{10}{2}$$

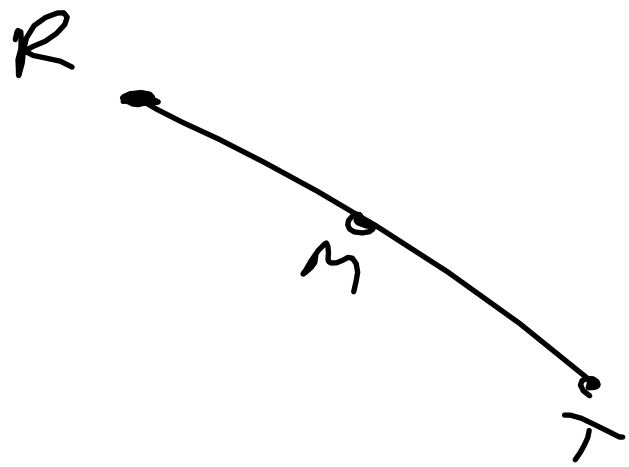
$$\textcircled{3, 5}$$

$$\underline{-EX} \rightarrow \overline{RT}, R(0,5), M(3,1)$$

T?

$$T(3+3, 1-4)$$

$$T(6, -3)$$



$$\underline{EX} \rightarrow \overline{RT}, R(-4,3), M(2,1)$$

$$T(8, -1) \quad \vdots \quad \begin{array}{r} 4, 2 \\ -(-4), -3 \\ \hline 8, -1 \end{array}$$

$$\underline{EX} \rightarrow \overline{RT}, R(2,3), M(8,2)$$

$$T(14, 1) \quad \vdots \quad \begin{array}{r} 16, 4 \\ -2, -3 \\ \hline 14, 1 \end{array}$$

$$\underline{EX} \rightarrow \overline{RT}, R(4,5), M(-9, -12)$$

$$T(-22, -29) \quad \vdots \quad \begin{array}{r} , -24 \\ -4, -5 \\ \hline -22, -29 \end{array}$$

HW: p. 54 → 6-21, 62, 64A