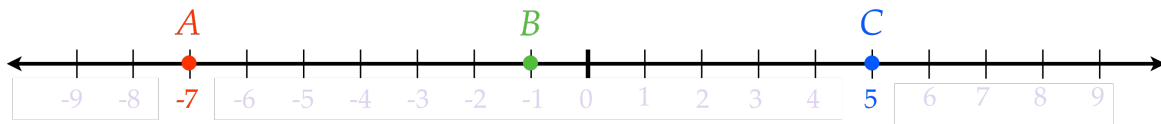Name _____

Midpoint Formula

Date _____ Period _____

On a number line: The coordinate of the midpoint of $\overline{AC}$, where
a and c are the coordinates of A and C respectively is

$$\frac{a + c}{2}$$

A   B   C

-9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9

Find the midpoint of $\overline{AC}$

On a number line: The coordinate of the midpoint of $\overline{AC}$, where
a and c are the coordinates of A and C respectively is

$$\frac{a + c}{2}$$

X   Y   Z

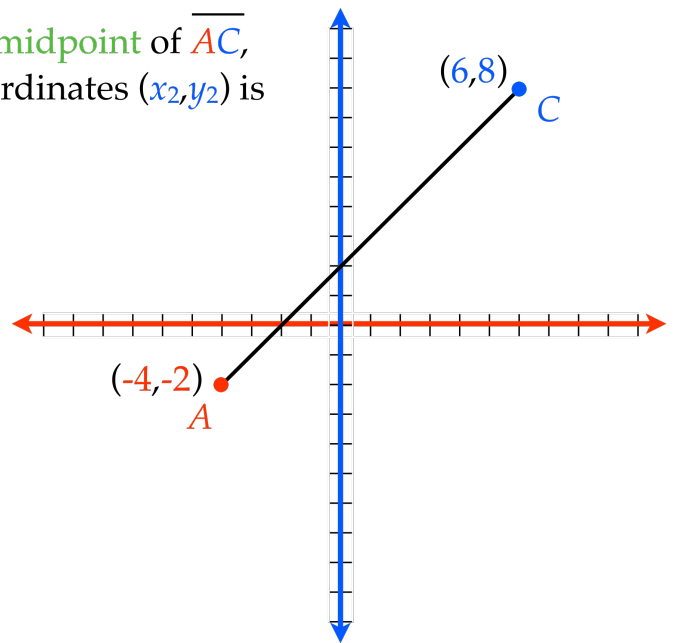-9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9
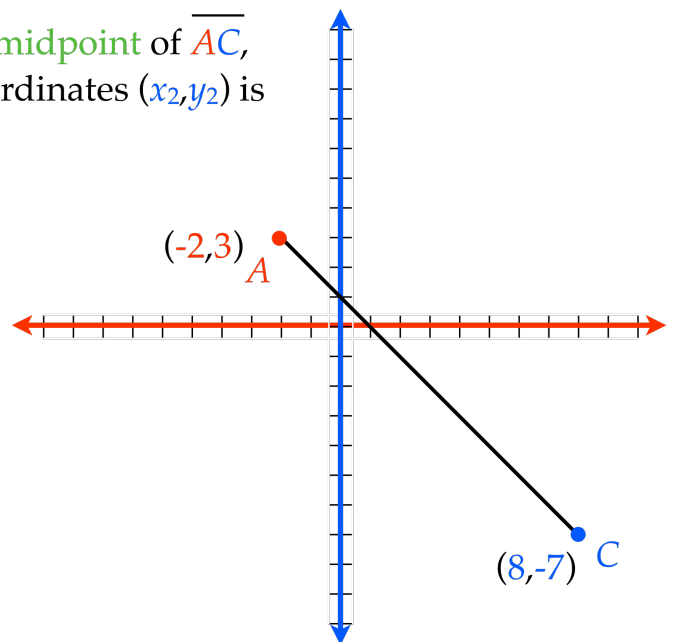
Find the midpoint of $\overline{XZ}$

In a coordinate plane: The coordinates of the midpoint of $\overline{AC}$, where A has coordinates (x_1, y_1) and C has coordinates (x_2, y_2) is

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

Find the midpoint of $\overline{AC}$

(6,8)

C

(-4,-2)

A

In a coordinate plane: The coordinates of the midpoint of $\overline{AC}$, where A has coordinates (x_1, y_1) and C has coordinates (x_2, y_2) is

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

Find the midpoint of $\overline{AC}$

(-2,3)

A

(8,-7)   C

On a number line: The coordinate of the midpoint of $\overline{AC}$, where a and c are the coordinates of A and C respectively is

$$\frac{a + c}{2}$$

In a coordinate plane: The coordinates of the midpoint of $\overline{AC}$, where A has coordinates (x_1, y_1) and C has coordinates (x_2, y_2) is

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