TEST will be next TUESDAY, April 12th.
BRING YOUR fully charged LAPTOP to class on FRIDAY, April 8th.

Name _____

1 In which quadrant of the coordinate plane is the point $(-7, -2\frac{1}{2})$ located?

(handwritten: (−,−))

Ⓐ Quadrant I ● Quadrant III
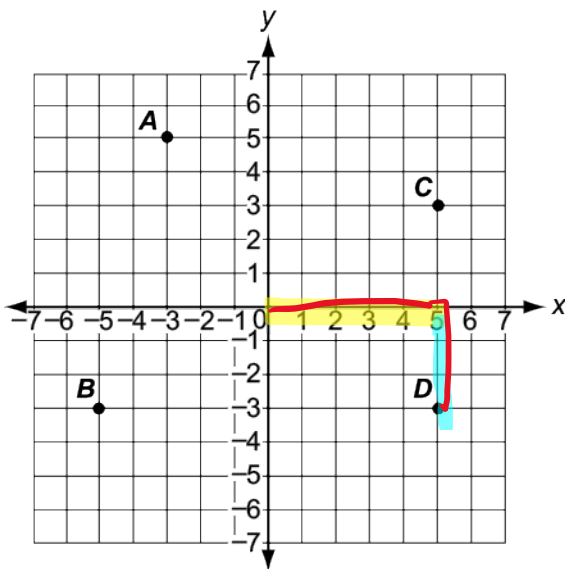Ⓑ Quadrant II Ⓓ Quadrant IV

2 What is the distance between the points (12, 6) and (−8, 6) on a coordinate plane?

(handwritten: Signs Different 12+8)

Ⓐ 4 units Ⓒ 12 units
Ⓑ 6 units ● 20 units

(handwritten: $|12| + |-8| = 20$)
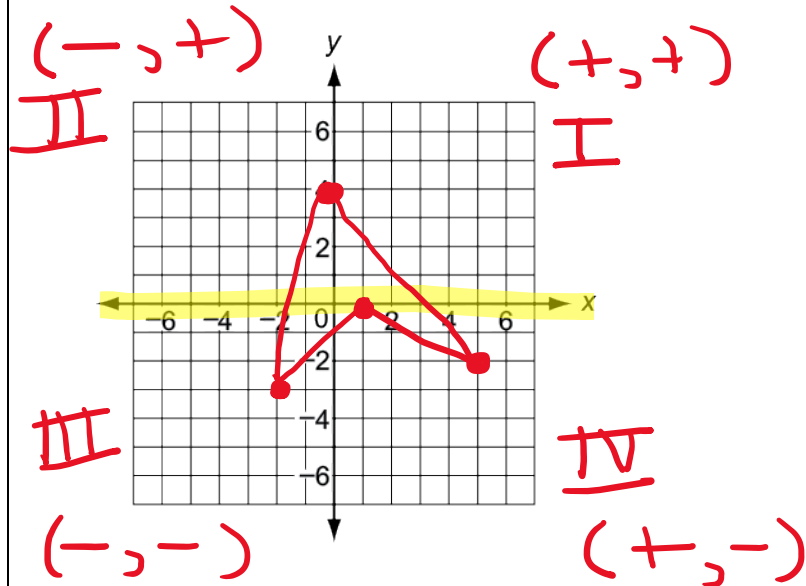
3 Which point is located at (5, −3) on the coordinate plane?

Ⓐ A Ⓒ C
Ⓑ B ● D

4 What are the coordinates of the point (−9, 10) after being reflected across the x-axis on a coordinate plane?

● (−9, −10) Ⓒ (9, −10) ✗
Ⓑ (−9, 10) Ⓓ (9, 10) ✗

(handwritten: change the sign of the y-value)

5 Graph a polygon with vertices located at (0, 4), (5, −2), (1, 0), and (−2, −3). *(handwritten: connect them in order.)*

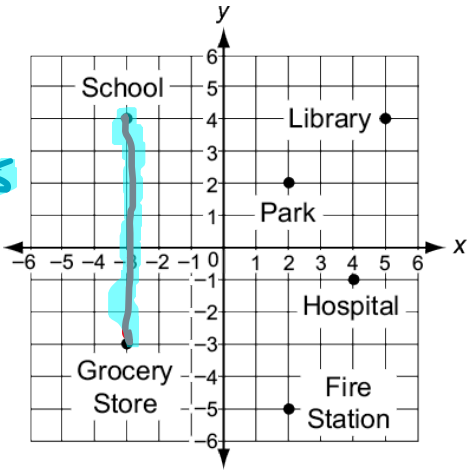*(handwritten labels: (−,+) II, (+,+) I, (−,−) III, (+,−) IV)*

6 A builder uses the coordinate plane below to plan the location of a rectangular plot of land for a new house. The length of one side of the house will be located from (2, 8) to (2, −4). If the perimeter of the plot of land is 36 units, where can the builder plan to build the new house?

Graph a possible location of the house.

(handwritten:
$$\text{Perimeter} = 36$$
$$P = 2(\ell + w)$$
$$36 = 2(12 + w)$$
$$18 = 12 + w$$
$$6 = w$$
)
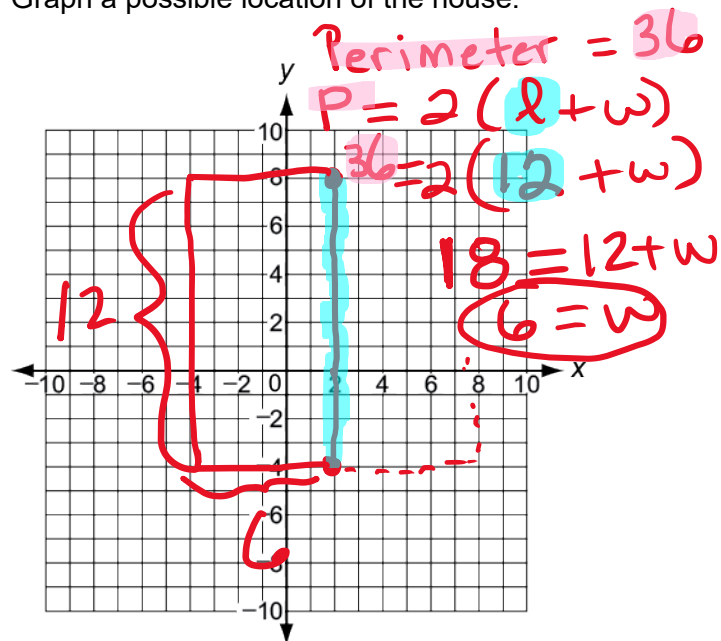
Name _____

7 Callie drew the map below to show her neighborhood.
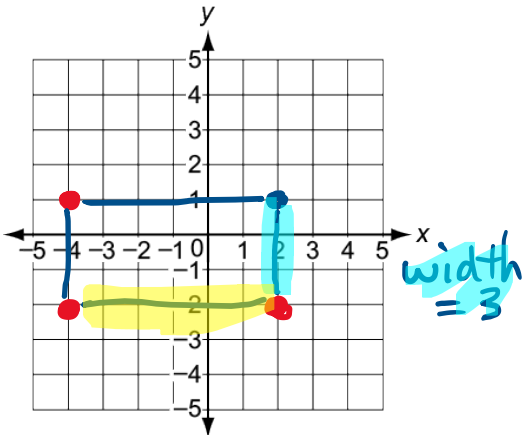
7 units

School — Library, Park, Hospital, Grocery Store, Fire Station graph

If each unit in the coordinate plane represents 1.5 miles, how many miles is it from the school to the grocery store?

$$\begin{array}{r} 3 \\ 1.5 \\ \times\ 7 \\ \hline 10.5 \end{array}$$

10.5 miles

8 Three vertices of a rectangle are located at (−4, 1), (−4, −2), and (2, −2) on a coordinate plane.

Part A

Graph the rectangle on the coordinate plane.

length = 6

width = 3

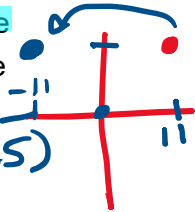**Part B**

What is the area of the rectangle in square units?

Area = 3 × 6 = 18 units²

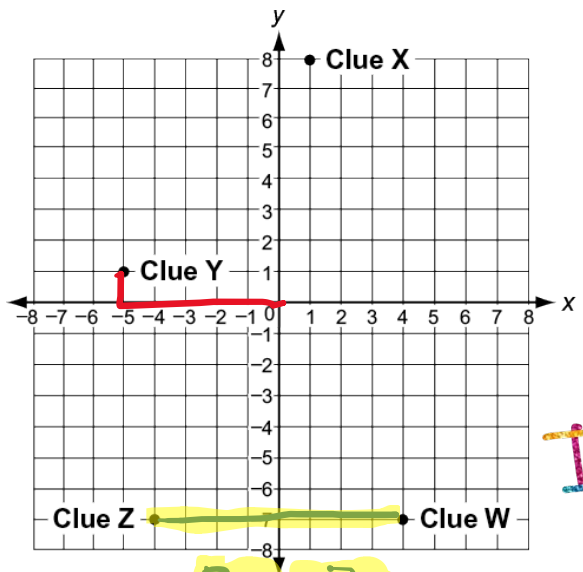**9** The point (11, 9.5) is reflected across the y-axis to create a new point. What is true about the new point?

The new point is located at **(−11, 9.5)**.

The distance between the two points is **22** units.

change the x-value

10 The coordinate plane shows the location of four clues for a scavenger hunt.

Clue X, Clue Y, Clue Z, Clue W graph

8 units

Part A

Which clue is located in Quadrant IV?

(A) Clue W   (C) Clue Y
(B) Clue X   (D) Clue Z

Part B

What are the coordinates of Clue Y?

(−5, 1)

Part C

If each unit on the coordinate plane equals 50 yards, how many yards apart are Clue Z and Clue W?

400 yards

$$\begin{array}{r} 50 \\ \times\ 8 \\ \hline 400 \end{array}$$