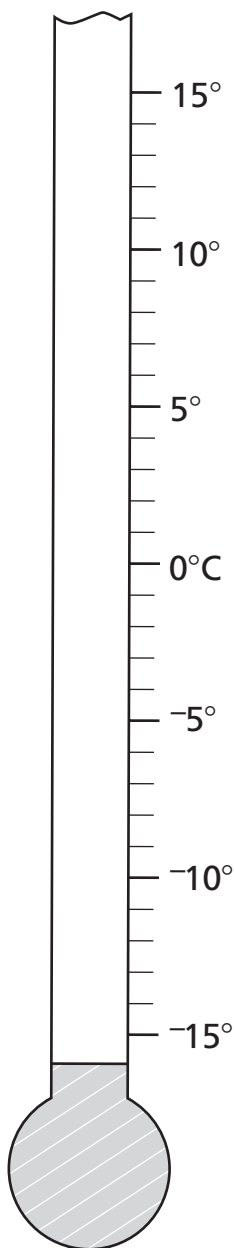


Introducing Negative Numbers

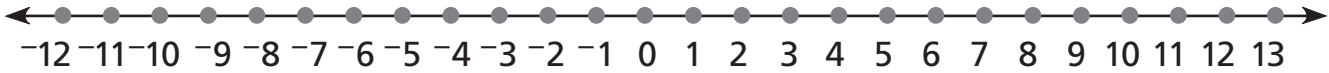
Draw a line from each clue to the temperature it describes.



- | | |
|----------|-------------------------------------|
| A | 6 degrees lower than 9°C |
| | Temperature A = _____ °C |
| B | 15 degrees lower than Temperature E |
| | Temperature B = _____ °C |
| C | 5 degrees higher than Temperature F |
| | Temperature C = _____ °C |
| D | 10 degrees lower than Temperature A |
| | Temperature D = _____ °C |
| E | 7 degrees higher than Temperature A |
| | Temperature E = _____ °C |
| F | 3 degrees higher than Temperature D |
| | Temperature F = _____ °C |
| G | 8 degrees lower than Temperature B |
| | Temperature G = _____ °C |
| H | 16 degrees lower than Temperature E |
| | Temperature H = _____ °C |

© Education Development Center, Inc.

Negative Numbers on the Number Line



Use this number line to help you answer the questions. Fill in the number sentences to show what you did.

1 Start at 4. Jump backward 4 spaces. Then jump backward 3 spaces.

Where are you? _____

$$\boxed{4} \ominus \boxed{4} \ominus \boxed{3} = \boxed{}$$

2 Start at -6. Jump forward 7 spaces. Then jump backward 2 spaces.

Where are you? _____

$$\boxed{} \oplus \boxed{} \ominus \boxed{} = \boxed{}$$

3 Start at 6. Jump forward 3 spaces. Then jump backward 6 spaces.

Where are you? _____

$$\boxed{} \oplus \boxed{} \ominus \boxed{} = \boxed{}$$

4 Start at 3. Jump forward 6 spaces. Then jump backward 9 spaces.

Where are you? _____

$$\boxed{} \oplus \boxed{} \ominus \boxed{} = \boxed{}$$

5 Start at $2\frac{1}{2}$. Jump backward 4 spaces. Then jump forward 1 space.

Where are you? _____

$$\boxed{} \ominus \boxed{} \oplus \boxed{} = \boxed{}$$

6 Start at 6.75. Jump forward 3 spaces. Then jump backward 12 spaces.

Where are you? _____

$$\boxed{} \oplus \boxed{} \ominus \boxed{} = \boxed{}$$

7 Start at 0. Jump forward 3 spaces. Then jump forward 3 half spaces.

Where are you? _____

$$\boxed{} \oplus \boxed{} \oplus \boxed{} = \boxed{}$$

8 Start at $-3\frac{1}{2}$. Jump forward 3 half spaces. Then jump backward 3 whole spaces.

Where are you? _____

$$\boxed{} \oplus \boxed{} \ominus \boxed{} = \boxed{}$$

Navigating on a Coordinate Grid

Aaron made these cards to remind him how to get from his house to some new places. Aaron's house is at $(0,0)$.

Doctor
$(2,7)$

Dentist
$(2,-6)$

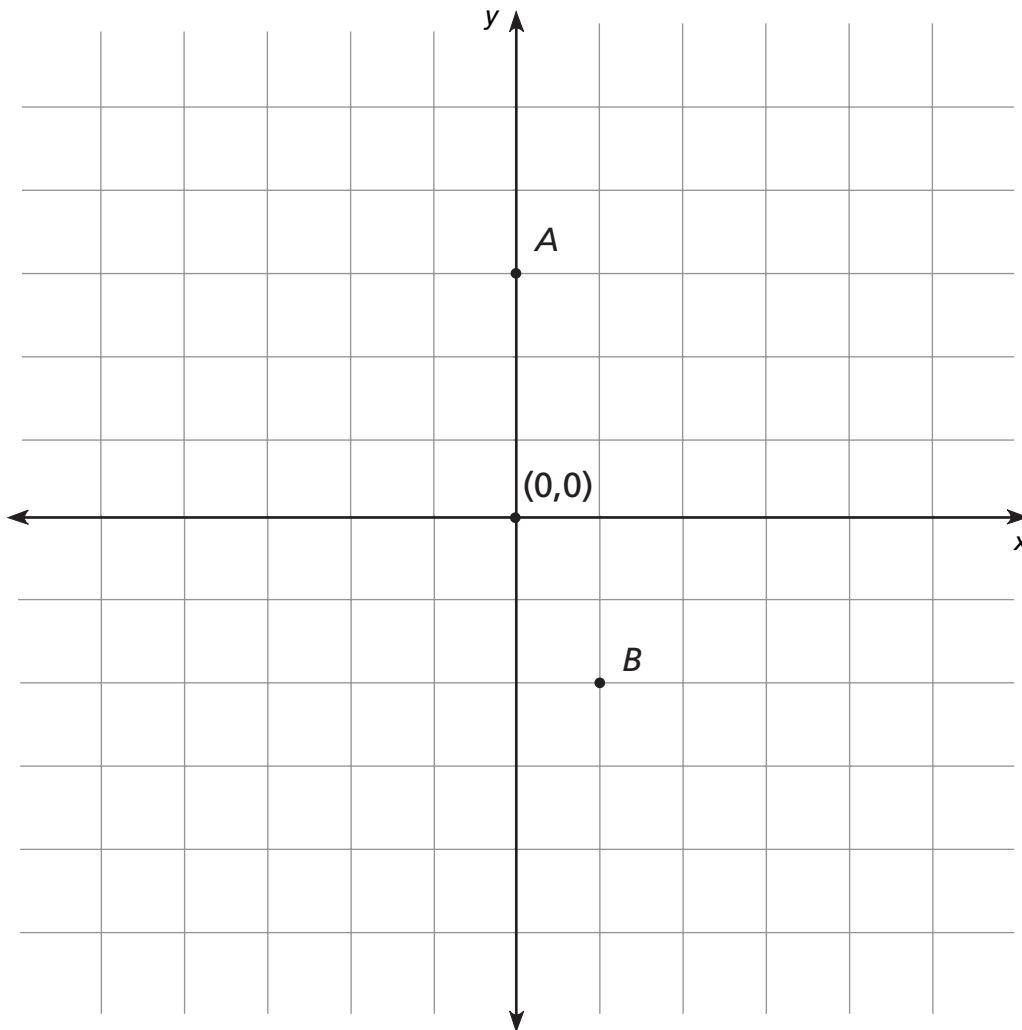
Movie Theater
$(-6,4)$

Laundromat
$(-7,-4)$

- 1 Without looking at the map, how can you use these cards to figure out how many blocks Aaron must walk to get from his house to the doctor's office?

- 2 How many blocks must Aaron walk to get from the doctor to the dentist? Explain how you know.

Points and Lines on a Grid



The taxi station is at (0,0). Point A is 3 blocks from the taxi station. So is point B.

Find all the other points that are 3 blocks from the taxi station. (Remember that the taxi can drive only along horizontal and vertical streets, not diagonally!)

Mark each point on the grid and write the coordinates of each point in this table.

(0,3)	(1,-2)						

Drawing Figures on a Coordinate Grid

On each grid, make a figure following these rules:

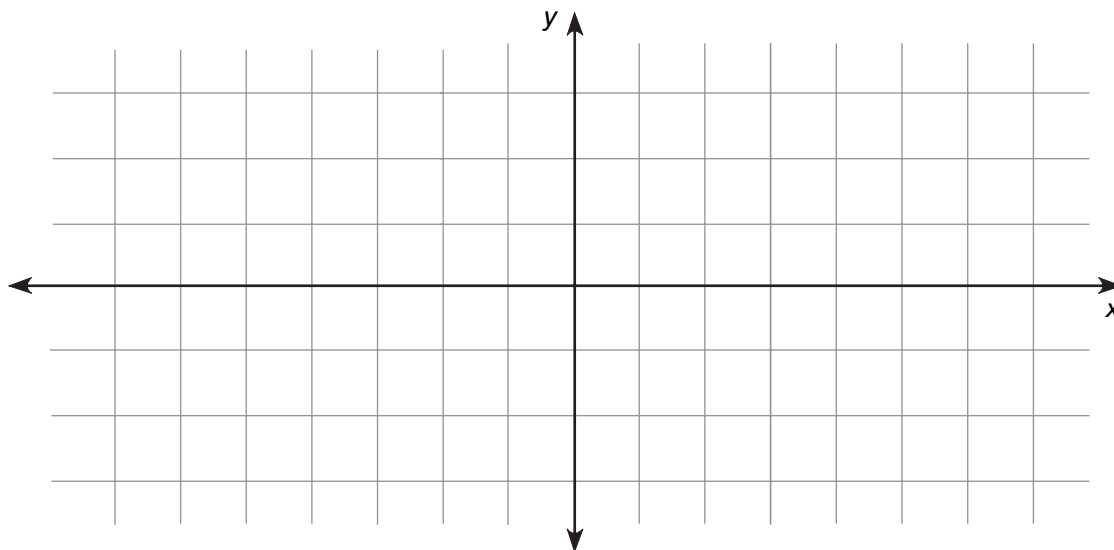
The figure is square.

No two of the points at the four corners of the square may have the same vertical coordinates.

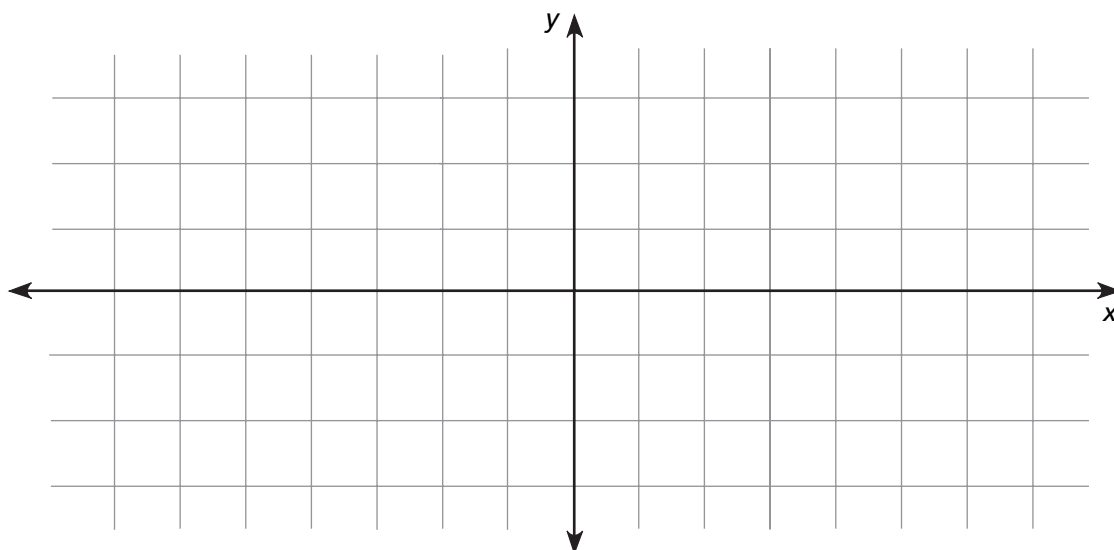
No two of the points at the four corners of the square may have the same horizontal coordinate.

Find a different way to do this on each grid.

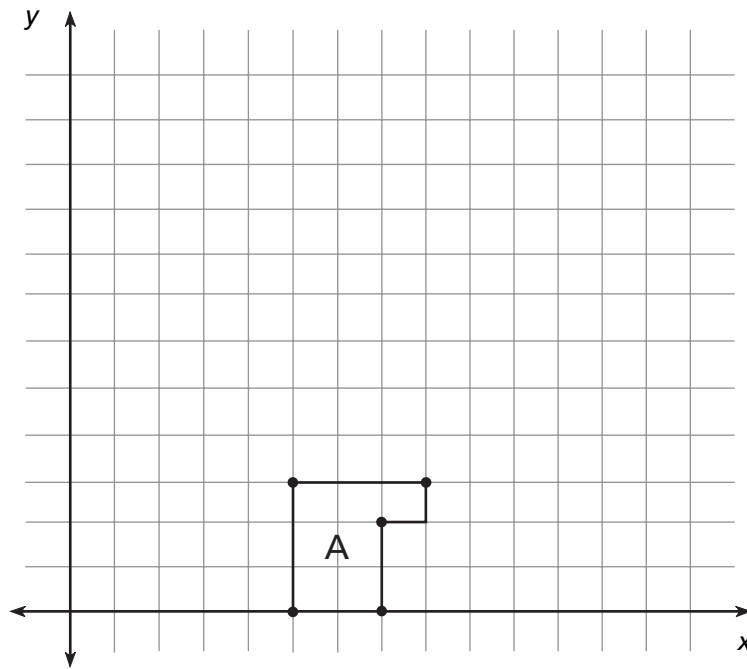
1



2



Moving Figures on a Coordinate Grid



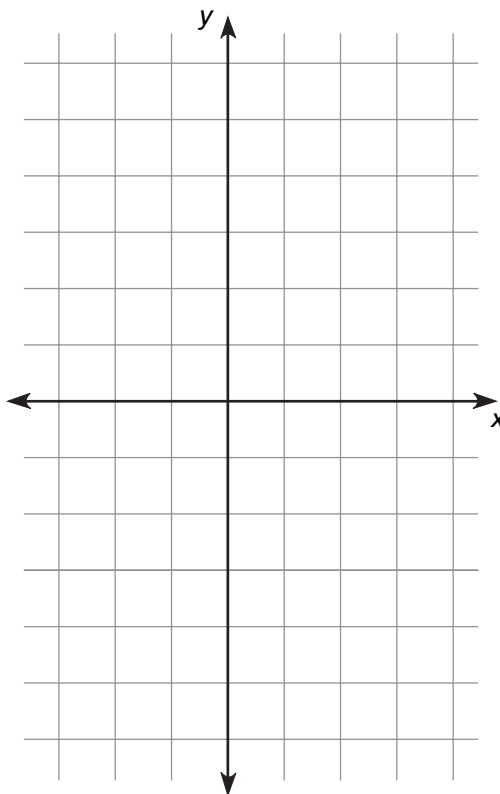
Translate, reflect, or rotate Figure A to draw two new figures on the grid. Label the new Figures B and C. In the tables below, record the coordinates of the points in the new figures.

A	B	C
(5,0)		
(7,0)		
(7,2)		
(8,2)		
(8,3)		
(5,3)		

Number Sentences and Straight Lines

**Mark the first two points and draw a line.
Then complete the table and find a rule
to describe the points on this line.**

(x,y)
$(0,0)$
$(1,2)$
$(2, \underline{\quad})$
$(10, \underline{\quad})$
$(-2, \underline{\quad})$
$(-6, \underline{\quad})$
$(\frac{1}{2}, \underline{\quad})$



Describe your rule with words or symbols.
