

# Lesson 14-2

Monday, April 27, 2020 9:05 AM

Name

MB 783



## Lesson 14-2

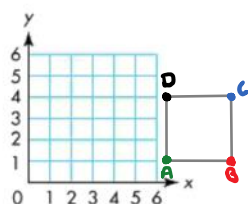
### Graph Data Using Ordered Pairs

#### Solve & Share

Graph and label the point for each ordered pair below on the grid. Then connect the points with line segments to form a shape. What shape did you draw?

**Use Appropriate Tools**  
You can graph points on a coordinate grid. Show your work!

A (2, 1) B (5, 1) C (5, 4) D (2, 4)



Quadrilateral  
Parallelogram  
Rectangle  
Rhombus  
Square

#### I can ...

graph points on a coordinate grid.

Content Standard 5.G.A.1  
Mathematical Practices MP.1, MP.2, MP.3, MP.5, MP.6, MP.8



**Look Back!** **MP.5 Use Appropriate Tools** What tool could you use to help connect points A, B, C, and D? Explain.

A ruler because rulers have straight edges.

## How Do You Graph a Point on a Coordinate Grid?

The table below shows the growth of a plant over a period of several days. Graph ordered pairs to show the plant's growth.

DATA	Time (days)	1	3	5	7	9
	Height (cm)	4	8	10	11	14

Let  $x$  be the number of days and let  $y$  be the height of the plant in centimeters.

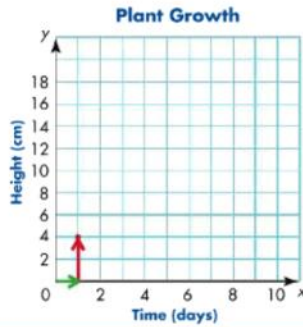


The ordered pairs are (1, 4), (3, 8), (5, 10), (7, 11), and (9, 14).

### B Step 1

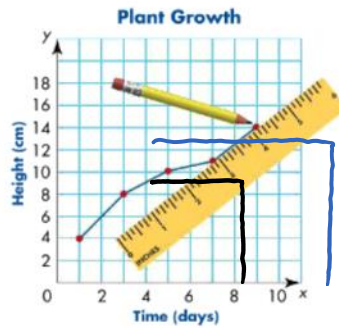
Graph the first point (1, 4).

Start at (0, 0). Move 1 unit to the right along the  $x$ -axis. Then move 4 units up.



### C Step 2

Plot the rest of the ordered pairs from the table. Use a ruler to connect the points.



**Convince Me!** **MP.2 Reasoning** Based on the data, about how tall was the plant on day 4? Day 8?

Day 4: 9cm

Day 8: About 13 cm

## ☆ Guided Practice

### Do You Understand?

1. **MP.3 Construct Arguments** Natalie is graphing Point T at (1, 8). Should she move to the right 8 units or up 8 units? Explain.

Up 8 units; The y-coordinate names the distance up from the origin.

2. **MP.8 Generalize** Describe how to graph the point (c, d).

Move c units right from the origin and then move d units up.

### Do You Know How?

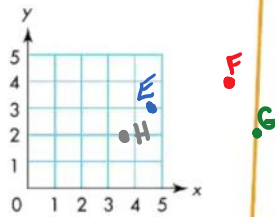
In 3–6, graph each point on the grid and label it with the appropriate letter.

3. E (1, 3)

4. F (4, 4)

5. G (5, 2)

6. H (0, 2)



## ☆ Independent Practice

In 7–18, graph and label each point on the grid at the right.

7. J (2, 6)

8. K (6, 2)

9. L (4, 5)

10. M (0, 8)

11. N (3, 9)

12. V (6, 6)

13. P (1, 4)

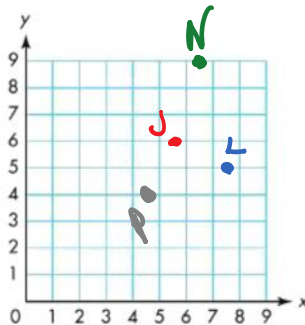
14. Q (5, 0)

15. R (7, 3)

16. S (7, 8)

17. T (8, 1)

18. U (3, 3)



Complete 7, 9, 11, 13, 19, 9, 25

\*For another example, see Set B on page 803.

## Math Practices and Problem Solving

19. **MP.2 Reasoning** How is graphing  $(0, 2)$  different from graphing  $(2, 0)$ ?

$(0, 2)$  is over 0 and up 2 and is on the y-axis.  
 $(2, 0)$  is over 2 and up 0 and is on the x-axis.

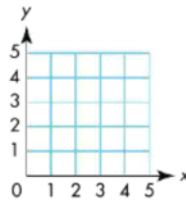
20. **Number Sense** Shane took a test that had a total of 21 items. He got about  $\frac{3}{4}$  of the items correct. About how many items did he get correct?

21. **Higher Order Thinking** Point C is located at  $(10, 3)$  and Point D is located at  $(4, 3)$ . What is the horizontal distance between the two points? Explain.

22. Laurel buys 3 balls of yarn. Each ball of yarn costs \$4.75. She also buys 2 pairs of knitting needles. Each pair costs \$5.75. She pays for her purchase with two 20-dollar bills. What is her change?

23. Graph the points below on the grid at the right.

A  $(2, 4)$     B  $(1, 2)$     C  $(2, 0)$   
 D  $(3, 0)$     E  $(4, 2)$     F  $(3, 4)$



24. **MP.5 Use Appropriate Tools** Alejandro wants to connect the points to form a shape. What would be the most appropriate tool for him to use? Use the tool to connect the points.

### Common Core Assessment

25. Talia draws a map of her neighborhood on a coordinate grid. Her map shows the school at S  $(1, 6)$ , her house at H  $(4, 3)$ , and the library at L  $(7, 2)$ . Graph and label each location on the grid at the right.

