LESSON MAKER PRO

Coordinate Quest

Read, write, and use ordered pairs.

GRADE 5 · MA.5.GR.4

MA.5.GR.4 "Plot points and represent problems on the coordinate plane"

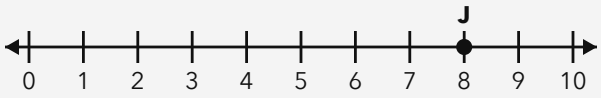
NAME _____ DATE _____

ORDERED PAIR RULE

An ordered pair names a point on a coordinate plane. Read the horizontal coordinate first, then the vertical coordinate, and write them in parentheses as (horizontal, vertical).

WORKED EXAMPLE

The number line shows the horizontal coordinate of point J. Point J has a vertical coordinate of 9. Write the ordered pair for J.

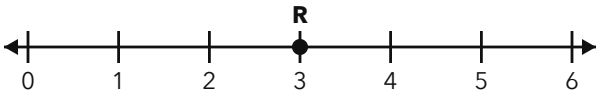


1. Read J's horizontal coordinate: 8.
2. Use the given vertical coordinate: 9.
3. Write the horizontal coordinate first: (8, 9).

Answer: (8, 9)

PRACTICE 6 problems

1 The number line shows the horizontal coordinate of point R. Point R has a vertical coordinate of 4. Write the ordered pair for R.



ANSWER _____

2 What is the horizontal coordinate in the ordered pair (6, 2)?

ANSWER _____

3 What is the vertical coordinate in the ordered pair (1, 5)?

ANSWER _____

4 A point is 2 units to the right and 6 units up from the origin. Write its ordered pair.

ANSWER _____

5 Point K is at (4, 1). How many units right and how many units up is K from the origin?

ANSWER _____

_____

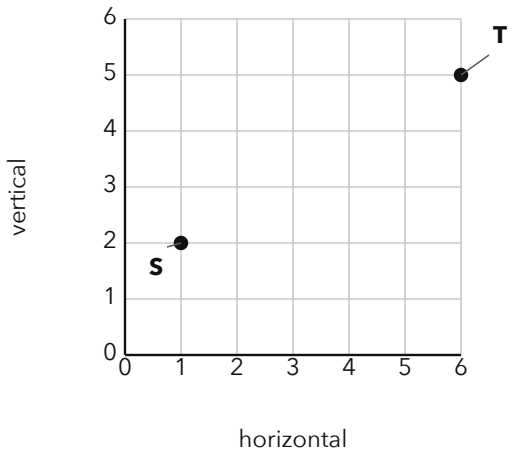
6 Lena plots M at (5, 3) and N at (3, 5). Which point has a horizontal coordinate of 5? Which point has a vertical coordinate of 5?

ANSWER _____

_____

APPLY IT Show your work

1 The grid shows locations in a video game. A player starts at S and needs to reach T. Write the ordered pair for T. Then tell how many units right and how many units up the player travels from S to T.



ANSWER _____

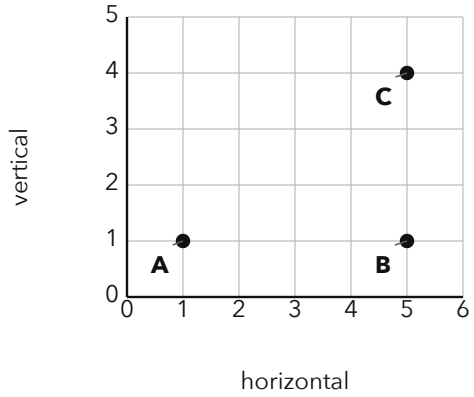
2 On a school garden map, the compost bin is at the origin. The water faucet is 4 meters to the right and 6 meters up from the compost bin. What ordered pair represents the water faucet? What does each number tell?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A park planner has marked three corners of a rectangular flower bed on the grid. Points A, B, and C are shown. What ordered pair should point D have to make a rectangle? Explain how you know. Plot and label point D on this grid.



WORK SPACE AND ANSWER

ANSWER KEY # Coordinate Quest

GRADE 5 · MA.5.GR.4

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	The number line shows the horizontal coordinate of point R. Point R has a vertical coordinate of 4. Write the ordered pair for R.	**(3, 4)**
2	What is the horizontal coordinate in the ordered pair (6, 2)?	**6**
3	What is the vertical coordinate in the ordered pair (1, 5)?	**5**
4	A point is 2 units to the right and 6 units up from the origin. Write its ordered pair.	**(2, 6)**
5	Point K is at (4, 1). How many units right and how many units up is K from the origin?	**4 units right and 1 unit up**
6	Lena plots M at (5, 3) and N at (3, 5). Which point has a horizontal coordinate of 5? Which point has a vertical coordinate of 5?	**M; N**

PART 2 · APPLY IT

1. **T is at (6, 5). The player travels 5 units right and 3 units up.** Read T's horizontal coordinate first and its vertical coordinate second. Compare T with S to find the horizontal and vertical moves.
2. **(4, 6). The 4 means 4 meters right, and the 6 means 6 meters up.** Start at (0, 0). Use the rightward movement as the first coordinate and the upward movement as the second coordinate.

CHALLENGE

D is at (1, 4). Point D must have the same horizontal coordinate as A and the same vertical coordinate as C.

Accept ordered pairs only when the horizontal coordinate is written first. For written explanations, accept equivalent wording that correctly identifies rightward movement as the first coordinate and upward movement as the second coordinate. Check the actual plotted D at the intersection horizontal 1, vertical 4, as well as the written pair and rectangle explanation.

Challenge: completed fourth vertex D

