

Coordinate Clues

Use directions to name each point.

GRADE 6 • 6.MG.3.d

6.MG.3.d "Identify ordered pairs represented by points in the four quadrants and on the axes of the coordinate plane. Ordered pairs will be limited to coordinates expressed as integers."

NAME _____

DATE _____

READ THE PLANE

An ordered pair is written (x, y) . Read the horizontal movement first, then the vertical movement: right and up are positive, while left and down are negative. A point on the y -axis has $x = 0$, and a point on the x -axis has $y = 0$.

WORKED EXAMPLE

Point J is 8 units left of the origin and 5 units up. What is its ordered pair?

1. Start at the origin, $(0, 0)$.
2. Moving 8 units left makes $x = -8$.
3. Moving 5 units up makes $y = 5$.
4. Write x first and y second.

Answer: $(-8, 5)$

PRACTICE 6 problems

- 1** Point A is 6 units left of the origin and 3 units up. What is its ordered pair?

ANSWER _____

- 2** Point B is 4 units right of the origin and 7 units down. What is its ordered pair?

ANSWER _____

- 3** Point C is 2 units left of the origin and 9 units down. What is its ordered pair?

ANSWER _____

- 4** Point D is on the y -axis, 6 units above the origin. What is its ordered pair?

ANSWER _____

- 5** Point E is on the x -axis, 4 units left of the origin. What is its ordered pair?

ANSWER _____

- 6** Point F is 7 units right of the origin and 2 units up. What is its ordered pair?

ANSWER _____

APPLY IT Show your work

- 1** In a video game map, the starting portal is at $(0, 0)$. A treasure chest is 6 tiles west and 1 tile south of the portal. What ordered pair names the treasure chest?

WORK SPACE

ANSWER _____

- 2** A skate park map has its entrance at $(0, 0)$. The water fountain is 2 blocks east and 7 blocks south of the entrance. What ordered pair names the water fountain?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Point P is at $(-3, 6)$. Point Q is on the y-axis. The y-coordinate of Q is the opposite of the x-coordinate of P. What is the ordered pair for Q? Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Point A is 6 units left of the origin and 3 units up. What is its ordered pair?	(-6, 3)
2	Point B is 4 units right of the origin and 7 units down. What is its ordered pair?	(4, -7)
3	Point C is 2 units left of the origin and 9 units down. What is its ordered pair?	(-2, -9)
4	Point D is on the y-axis, 6 units above the origin. What is its ordered pair?	(0, 6)
5	Point E is on the x-axis, 4 units left of the origin. What is its ordered pair?	(-4, 0)
6	Point F is 7 units right of the origin and 2 units up. What is its ordered pair?	(7, 2)

PART 2 • APPLY IT

1. **(-6, -1)** West means the x-coordinate is negative, so $x = -6$. South means the y-coordinate is negative, so $y = -1$.
2. **(2, -7)** East gives a positive x-coordinate of 2. South gives a negative y-coordinate of -7.

CHALLENGE

(0, 3). Point Q is on the y-axis, so its x-coordinate is 0. The opposite of -3 is 3, so its y-coordinate is 3.

Accept ordered pairs only when x is written first and y is written second. For the challenge, accept equivalent explanations that state $x = 0$ on the y-axis and that the opposite of -3 is 3.