LESSON MAKER PRO

Coordinate Quest

Read, move, and reason on the coordinate plane.

GRADE 6 · MA.6.GR.1

MA.6.GR.1 "Apply previous understanding of the coordinate plane to solve problems."

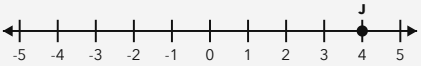
NAME _____ DATE _____

ORDERED PAIR PATH

An ordered pair is written (x, y). Start at the origin, move left or right to find x, then move up or down to find y. Positive x-values are right, and positive y-values are up.

WORKED EXAMPLE

The number line shows point J's x-coordinate. Point J has a y-coordinate of -4. Write J's ordered pair.



1. Read 4 at J's horizontal position.
2. Use -4 for the vertical position.
3. Write x first, then y: (4, -4).

Answer: (4, -4)

PRACTICE 6 problems

1 In which quadrant is point P(-5, 3)?

ANSWER _____

2 Point R is at (3, -2). What are its x-coordinate and y-coordinate?

ANSWER _____

3 A point starts at (-1, 1). It moves 3 units right and 2 units down. What is its new coordinate?

ANSWER _____

4 Points M(2, 5) and N(2, -1) are on the coordinate plane. Which coordinate is the same for both points?

ANSWER _____

5 Reflect point S(-3, -2) across the y-axis. What is the coordinate of the reflected point?

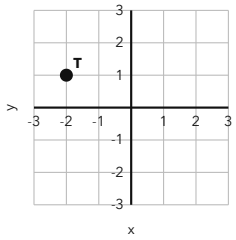
ANSWER _____

6 How far apart are points A(-2, 1) and B(3, 1)?

ANSWER _____

APPLY IT Show your work

1 A gaming club places a treasure chest at point T on its game map. Write the chest's coordinate and name its quadrant.



ANSWER _____

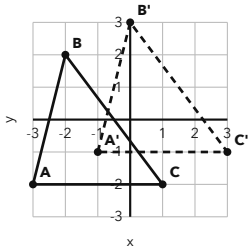
2 In a coding game, Maya's character starts at (-4, 1). The character moves 6 units right and 3 units up. What is the character's new coordinate?

WORK SPACE

ANSWER _____

CHALLENGE One step up

The solid triangle is ABC. The dashed triangle is A'B'C'. Describe the translation that maps ABC onto A'B'C'. Explain how the coordinates of each vertex change.



WORK SPACE AND ANSWER

ANSWER KEY

Coordinate Quest

GRADE 6 · MA.6.GR.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	In which quadrant is point P(-5, 3)?	**Quadrant II**
2	Point R is at (3, -2). What are its x-coordinate and y-coordinate?	**x-coordinate: 3; y-coordinate: -2**
3	A point starts at (-1, 1). It moves 3 units right and 2 units down. What is its new coordinate?	**(2, -1)**
4	Points M(2, 5) and N(2, -1) are on the coordinate plane. Which coordinate is the same for both points?	**The x-coordinate, 2**
5	Reflect point S(-3, -2) across the y-axis. What is the coordinate of the reflected point?	**(3, -2)**
6	How far apart are points A(-2, 1) and B(3, 1)?	**5 units**

PART 2 · APPLY IT

1. **(-2, 1), Quadrant II** Read the x-coordinate first, then the y-coordinate. A negative x-value and positive y-value place T in Quadrant II.
2. **(2, 4)** Add 6 to the x-coordinate: -4 + 6 = 2. Add 3 to the y-coordinate: 1 + 3 = 4.

CHALLENGE

Translate 2 units right and 1 unit up. Each x-coordinate increases by 2, and each y-coordinate increases by 1.

Accept ordered pairs only when x is written first and y is written second. Accept "II" or "Quadrant 2" for Quadrant II.