

Coordinate Quest

Find your place on the grid.

GRADE 6 • 6.MG.3.a

6.MG.3.a "Identify and label the axes, origin, and quadrants of a coordinate plane."

NAME _____

DATE _____

GRID LANDMARKS

The x-axis runs left and right, and the y-axis runs up and down. They meet at the origin, (0,0), and the four quadrants are numbered I, II, III, and IV going counterclockwise from the upper right.

WORKED EXAMPLE

Which quadrant contains point P(9,-8)?

1. The x-coordinate, 9, is positive, so move right.
2. The y-coordinate, -8, is negative, so move down.
3. A point right of the y-axis and below the x-axis is in Quadrant IV.

Answer: Quadrant IV

PRACTICE 6 problems

1 Which quadrant contains point A(-4,5)?

ANSWER _____

2 Point B is at (0,-7). Is it on the x-axis, y-axis, or neither axis?

ANSWER _____

3 Which quadrant contains point C(-2,-6)?

ANSWER _____

4 Point D is at (0,0). What is the name of this location?

ANSWER _____

5 Point E is at (-1,0). Is it on the x-axis, y-axis, or neither axis?

ANSWER _____

6 Which quadrant contains point F(7,4)?

ANSWER _____

APPLY IT Show your work

- 1** In a video game, a team's base is marked at $(5, -2)$ on a coordinate map. In which quadrant is the base?

WORK SPACE

ANSWER _____

- 2** A music app places a song marker at $(-6, 0)$ on its coordinate screen. Is the marker on the x-axis, y-axis, or in a quadrant?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Rina says that point $G(0, -3)$ is in Quadrant IV because its y-coordinate is negative. Is Rina correct? Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Which quadrant contains point A(-4,5)?	Quadrant II
2	Point B is at (0,-7). Is it on the x-axis, y-axis, or neither axis?	y-axis
3	Which quadrant contains point C(-2,-6)?	Quadrant III
4	Point D is at (0,0). What is the name of this location?	the origin
5	Point E is at (-1,0). Is it on the x-axis, y-axis, or neither axis?	x-axis
6	Which quadrant contains point F(7,4)?	Quadrant I

PART 2 • APPLY IT

1. **Quadrant IV** The x-coordinate is positive, so the point is to the right of the y-axis. The y-coordinate is negative, so it is below the x-axis, in Quadrant IV.
2. **x-axis** The y-coordinate is 0, so the point lies on the x-axis. Points on an axis are not in a quadrant.

CHALLENGE

No. Point G is on the y-axis because its x-coordinate is 0. A point on an axis is not in any quadrant.

Accept quadrant names or Roman numerals I, II, III, and IV. Accept x-axis and y-axis with or without a hyphen, and do not accept a quadrant for any point on an axis.