5.3 Key Concepts 2 Characteristics of Points in Each Quadrant Worked Example

Example: What quadrant does the point Q(3, -2) lie in?

Solution: The characteristics of the points in each quadrant are summarized as shown. Therefore, point Q lies in the fourth quadrant.

| | У | |
|-----------------------|---|-----------------------|
| x-coordinate negative | | x-coordinate positive |
| y-coordinate positive | | y-coordinate positive |
| | | |
| | 0 | × |
| x-coordinate negative | | x-coordinate positive |
| y-coordinate negative | | y-coordinate negative |
| | | |

Practice:

- **1.** What quadrant does the point R(-4, -2) lie in?
- 2. What quadrant does the point S(-5, 2) lie in?

Answers: 1. the third. 2. the second.