What Vocabulary Will You Learn?

- axiom
- betweenness of points
- bisect
- collinear
- congruent
- congruent segments
- construction
- coordinate geometry
- coplanar
- defined term
- definition
- equidistant
- Euclidean geometry
- intersection
- line
- line segment
- midpoint
- plane
- point
- postulate
- segment bisector
- space
- theorem
- undefined terms
- weighted average

Are You Ready?

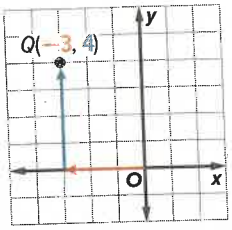
Complete the Quick Review to see if you are ready to start this module.
Then complete the Quick Check.

Quick Review

Example 1

Graph and label the point $Q(-3, 4)$ in the coordinate plane.

Start at the origin. Because the x-coordinate is negative, move 3 units to the left. Then move 4 units up because the y-coordinate is positive. Draw a dot and label it Q.



Example 2

Evaluate the expression $[-2 - (-7)]^2 + (1 - 8)^2$.

Follow the order of operations.

$[-2 - (-7)]^2 + (1 - 8)^2$

$= 5^2 + (-7)^2$ Subtract in parentheses.

$= 25 + 49$ Evaluate exponents.

$= 74$ Add.

Quick Check

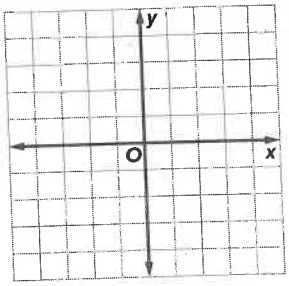
Graph and label each point on the coordinate plane.

1. $W(-5, 2)$

2. $X(0, 4)$

3. $Y(-3, -1)$

4. $Z(4, -2)$



Evaluate each expression.

5. $(4 - 2)^2 + (7 - 3)^2$

6. $(-5 - 3)^2 + (3 - 4)^2$

7. $[-1 - (-9)]^2 + (5 - 3)^2$

8. $[-3 - (-4)]^2 + [-1 - (-6)]^2$

How did you do?

Which exercises did you answer correctly in the Quick Check? Shade those exercise numbers below.

(1) (2) (3) (4) (5) (6) (7) (8)