Get Ready for the Chapter

Diagnose Readiness | You have two options for checking prerequisite skills.

1 Textbook Option Take the Quick Check below. Refer to the Quick Review for help.

QuickCheck

Evaluate $3a^2 - 2ab + c$ for the values given.

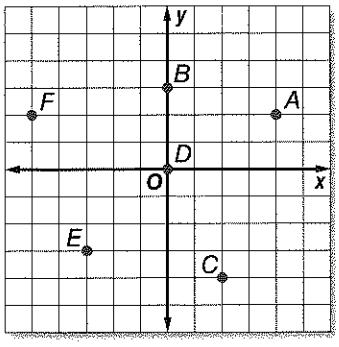
1. $a = 2, b = 1, c = 5$
2. $a = -3, b = -2, c = 3$
3. $a = -1, b = 0, c = 11$
4. $a = 5, b = -3, c = -9$
5. **CAR RENTAL** The cost of renting a car is given by $49x + 0.3y$. Let x represent the number of days rented, and let y represent the number of miles driven. Find the cost for a five-day rental over 125 miles.

Solve each equation for the given variable.

6. $x + y = 5$ for y
7. $2x - 4y = 6$ for x
8. $y - 2 = x + 3$ for y
9. $4x - 3y = 12$ for x
10. **GEOMETRY** The formula for the perimeter of a rectangle is $P = 2w + 2\ell$, where w represents width and ℓ represents length. Solve for w.

Write the ordered pair for each point.

11. A
12. B
13. C
14. D
15. E
16. F



QuickReview

Example 1

Evaluate $2(m - n)^2 + 3p$ for $m = 5$, $n = 2$, and $p = -3$.

$2(m - n)^2 + 3p$	Original expression
$= 2(5 - 2)^2 + 3(-3)$	Substitute.
$= 2(3)^2 + 3(-3)$	Subtract.
$= 2(9) + 3(-3)$	Evaluate power.
$= 18 + (-9)$	Multiply.
$= 9$	Add.

Example 2

Solve $5x + 15y = 9$ for x.

$5x + 15y = 9$	Original equation
$5x + 15y - 15y = 9 - 15y$	Subtract $15y$ from each side.
$5x = 9 - 15y$	Simplify.
$\frac{5x}{5} = \frac{9 - 15y}{5}$	Divide each side by 5.
$x = \frac{9}{5} - 3y$	Simplify.

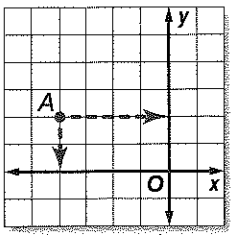
Example 3

Write the ordered pair for A.

Step 1 Begin at point A.

Step 2 Follow along a vertical line to the x-axis. The x-coordinate is -4.

Step 3 Follow along a horizontal line to the y-axis. The y-coordinate is 2.



The ordered pair for point A is $(-4, 2)$.

2 Online Option Take an online self-check Chapter Readiness Quiz at connectED.mcgraw-hill.com.