NAME

DATE

Module 7 Solving Linear Equations and

Inequalities of Two Variables

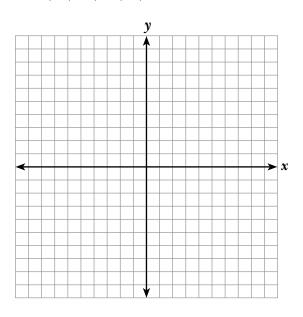
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Lesson 1 Defining Linear Equations of Two

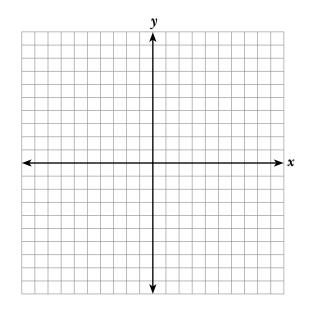
Variables and Their Solutions



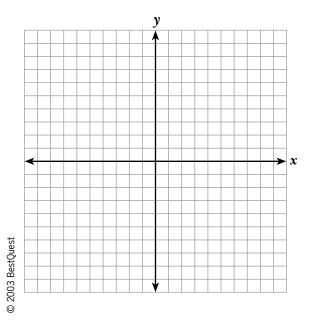
Graph the following ordered pairs.



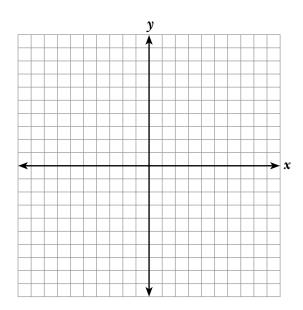
2. (1, 6), (2, -2), (4, 0)



3. (0, 3), (-9, -1), (3, -1)



4. (-3, 1), (3, 4), (3, -8)



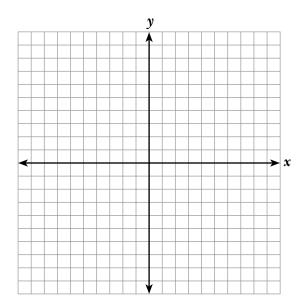
Module 7 Lesson 1

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Independent Practice

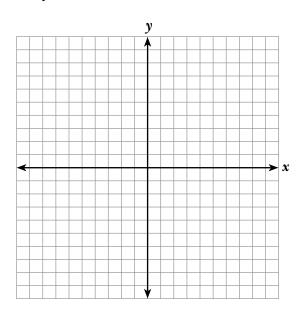
Graph the following equations.

5.
$$x = -4$$



6.
$$y = 2$$

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Find the solution to each equation for the given value of the variable.

7.
$$4x + 2y = 22$$
 when $x = 2$

8.
$$y - 3x = 14$$
 when $y = 2$

9.
$$2x + 8y = 2$$
 when $y = -3$

10.
$$3x - y = -1$$
 when $x = -2$

Find three solutions to each of the following linear equations.

11.
$$6x - y = 6$$

12.
$$y - 3x = 1$$

13.
$$x + y = 10$$

14.
$$3x - 5y = 15$$

15.
$$y - 2x = -4$$

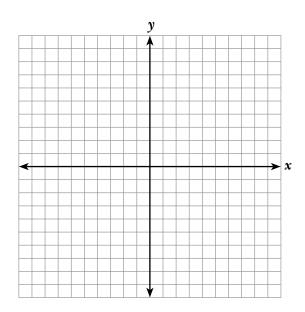
16.
$$5x + 5y = 15$$

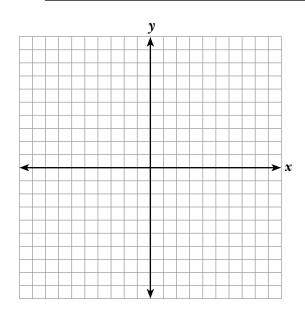
Find the solutions to the equations for the given value of the variables. Then graph those solutions.

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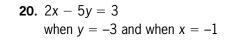
17.
$$2x - y = 3$$
 when $y = -3$ and when $x = 5$

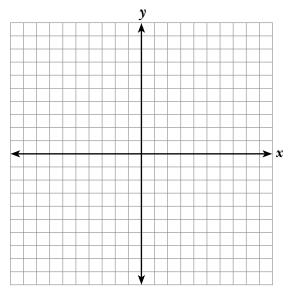
18.
$$4y + 3x = -1$$
 when $x = 5$ and when $y = 2$

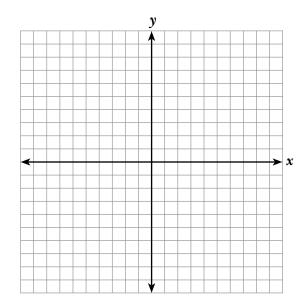




19.
$$7x + y = 11$$
 when $x = 1$ and when $y = -3$







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Journal

- 1. Explain how a letter-number can be used to find a location on a map.
- 2. Explain why a linear equation of two variables has an infinite number of solutions.

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- **3.** Explain how to graph the point $\left(-2\frac{1}{3}, 5\frac{5}{6}\right)$.
- **4.** Explain how to graph the solution set of the equation x + y = 8.
- **5.** Explain why the graph of the equation y = -4 is a horizontal line.

Cumulative Review

Solve for x.

1.
$$x^2 = 4$$

2.
$$x^2 + 3 = 4$$

3.
$$x^3 - 4 = 4$$

4.
$$x + 4 = 13x$$

5.
$$x^2 + 30 = 2x^2 + 5$$

6.
$$2^2 - x^3 = -23$$

7.
$$14 + 4x = 22$$

8.
$$\sqrt[3]{x} = 5$$

9.
$$x^4 - 7 = -6$$

10.
$$x + 4 = 4x - 11$$