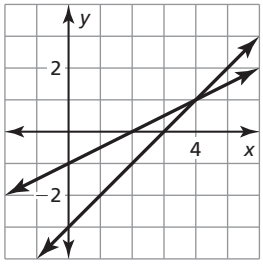
Name_____ Date _____

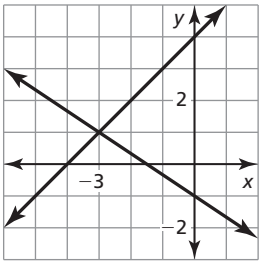
5.5 Practice B

In Exercises 1 and 2, use the graph to solve the equation. Check your solution.

1. $x - 3 = \frac{1}{2}x - 1$



2. $-\frac{2}{3}x - 1 = x + 4$



In Exercises 3–6, solve the equation by graphing. Check your solution.

3. $-3x + 5 = x + 1$

4. $\frac{1}{4}x - 6 = -2x + 3$

5. $3x + 6 = 3(x + 2)$

6. $-5(x + 2) = 4x - 1$

In Exercises 7 and 8, solve the equation by graphing. Determine whether the equation has *one solution*, *no solution,* or *infinitely many solutions.*

7. $-2(-x - 1) = 2x + 2$

8. $\frac{1}{4}(12x - 10) = 3x + 2$

In Exercises 9 and 10, solve the equation by graphing. Check your solutions.

9. $|x + 2| = |5 - x|$

10. $3|x - 1| = |2x + 8|$

In Exercises 11 and 12, use a graphing calculator to solve the equation.

11. $0.6x - 1.1 = 0.5x - 0.4$

12. $1.3x + 0.8 = 2.5x - 0.4$

13. Determine one set of values of a and b of the equation $2x - 3 = ax + b$ in each situation.

a. The equation has no solution.

b. The equation has infinitely many solutions.

c. $x = 4$ is a solution.

14. You need to hire a taxi. Taxi A charges \$9.25 plus \$1.50 per mile. Taxi B charges \$10.50 plus \$1.25 per mile. Use a graphing calculator to find the number of miles for which the total costs are the same for each taxi.