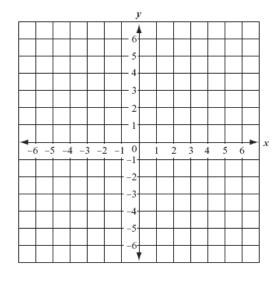
Systems of Equations and Inequalities Practice

1. Solve the system by graphing

$$y = 3x - 1$$

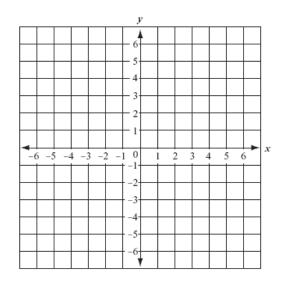
$$y = -x + 3$$



2. Solve the system by graphing

$$-x + 2y = -2$$

$$y = \frac{1}{2}x + 3$$



Solve each system by substitution.

$$3. \quad \begin{aligned} y &= 3x + 11 \\ y &= -2x + 1 \end{aligned}$$

$$y = -2x + 1$$

4.
$$4x - y = -12$$
$$-6x + 5y = -3$$

$$5. \quad \begin{aligned} y &= 5x - 8 \\ 5y &= 2x + 6 \end{aligned}$$

Solve each system using elimination.

$$6. \quad y = -3x + 5$$
$$y = -4x - 1$$

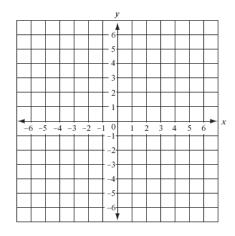
$$7. \quad 2x - 3y = 5 \\
x + 2y = -1$$

$$8. \quad \begin{aligned} x + 4y &= 12 \\ 2x - 3y &= 2 \end{aligned}$$

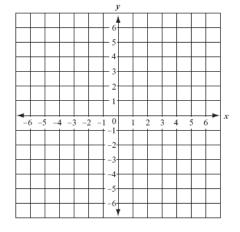
$$9. \quad 3x - 3y = 3$$
$$x = y + 1$$

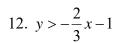
Graph each inequality.

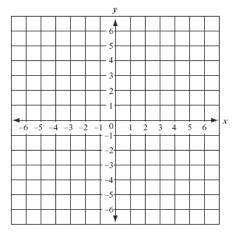
10.
$$y \ge 4x - 5$$



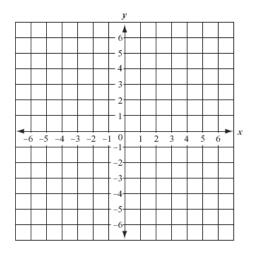
11.
$$y < -3x + 5$$



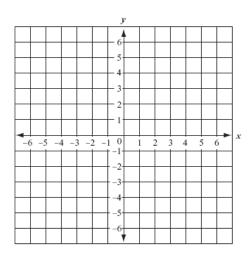




13.
$$y < 2x + 4$$
$$-3x - 2y \ge 6$$



$$14. \quad y \le -\frac{1}{3}x + 7$$
$$y \ge -x + 1$$



Bonus

Write the inequality that has the solution described.

The point (7, 12) and (-3,-8) lie on the boundary line, but neither point is a solution. The point (1, 1) is also a solution.