Systems of Inequalities

1. Graph each inequality

$$y \geq \frac{1}{3}x$$

2. Graph each inequality

$$x > 2$$

3. Graph each inequality

$$y \leq -1$$

4. Graph each inequality

$$x^2 + y^2 \leq 9$$

5. Graph each inequality

$$x^2 + y^2 > 25$$

6. Graph each inequality

$$y < x^2 - 4$$

7. Graph each inequality

$$y \geq x^2 + 3$$

8. Graph the solution set of each system of inequalities or indicate that the system has no solution

$$y < -3x + 1$$
$$y < x + 2$$

9. Graph the solution set of each system of inequalities or indicate that the system has no solution

$$y \geq x^2 - 1$$
$$x - y \geq -3$$

10. Graph the solution set of each system of inequalities or indicate that the system has no solution

$$x^2 + y^2 \geq 9$$
$$x^2 + y^2 < 16$$