Graph each inequality.

1.
$$y > 2x + 1$$

2.
$$y < 3$$

3.
$$x \le 0$$

4.
$$y \le x - 5$$

5.
$$2x + 3y \ge 12$$

6.
$$2y \ge 4x - 6$$

7.
$$y > \frac{2}{3}x + \frac{1}{3}$$

8.
$$3x - 2y \le 9$$

9.
$$5x > -y + 3$$

- 10. Cooking The time needed to roast a chicken depends on its weight. Allow at least 20 min/lb for a chicken weighing as much as 6 lb. Allow at least 15 min/lb for a chicken weighing more than 6 lb.
 - a. Write two inequalities to represent the time needed to roast a chicken.
 - b. Graph the inequalities.

Graph each absolute value inequality.

11.
$$y \ge |2x - 1|$$

12.
$$y \le |3x| + 1$$

13.
$$y \leq |4 - x|$$

14.
$$v > |-x + 4| + 1$$

15.
$$y - 7 > |x + 2|$$

14.
$$y > |-x + 4| + 1$$
 15. $y - 7 > |x + 2|$ **16.** $y + 2 \le \left|\frac{1}{2}x\right|$

17.
$$3 - y \ge -|x - 4|$$
 18. $1 - y < |2x - 1|$ 19. $y + 3 \le |3x| - 1$

18.
$$1 - y < |2x - 1|$$

19.
$$y + 3 \le |3x| - 1$$

Graph each inequality on a coordinate plane.

23.
$$5x - 2y \ge -10$$

24.
$$2x - 5y < -10$$

23.
$$5x - 2y \ge -10$$
 24. $2x - 5y < -10$ **25.** $\frac{3}{4}x + \frac{2}{3}y > \frac{5}{2}$

26.
$$3(x-2) + 2y \le 6$$
 27. $0.5x + 1.2y < 6$ **28.** $-3x + 4y > -6$

27.
$$0.5x + 1.2y < 6$$

28.
$$-3x + 4y > -6$$

29.
$$\frac{1}{2}x + \frac{2}{3}y \ge 1$$
 30. $|x - 1| > y + 7$ **31.** $y - |2x| \le 21$

30.
$$|x-1| > y+7$$

31.
$$y - |2x| \le 21$$

32.
$$\frac{2}{3}x + 2 \le \frac{2}{9}y$$

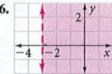
32.
$$\frac{2}{3}x + 2 \le \frac{2}{9}y$$
 33. $0.25y - 1.5x \ge -4$ 34. $8x - 4y \ge -3$

34.
$$8x - 4y \ge -3$$

35. Open-Ended Write an inequality that has (10, 15), (-10, 20), (-20, -25), and (25, -10) as solutions.

Write an inequality for each graph.

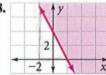
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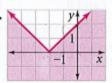
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38.



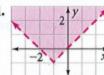
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40.

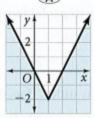


41.



42. Multiple Choice Which graph best represents the solution of the inequality $y \ge 2|x-1|-2$?

A



B

0

