Practice B

For use with the lesson "Graph Linear Inequalities in Two Variables"

Tell whether the ordered pair is a solution of the inequality.

1.
$$x + y > -9$$
; $(0, 0)$

2.
$$x - y \ge 8$$
; (14, 9)

3.
$$2x - y > 4$$
; $(-6, -15)$

4.
$$2x + y > -5$$
; $(-5, 12)$

5.
$$5x + 2y \le 8$$
; $(-3, 6)$

6.
$$4x - 3y \ge -5$$
; (6, 8)

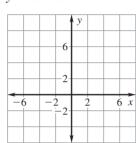
7.
$$0.5x + 2.5y \ge 2$$
; (0, 0)

8.
$$1.2x - 3.1y < 4$$
; (3, -1)

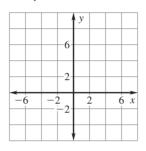
7.
$$0.5x + 2.5y \ge 2$$
; $(0, 0)$ **8.** $1.2x - 3.1y < 4$; $(3, -1)$ **9.** $0.2y - 0.5x > -1$; $(-4, -8)$

Graph the inequality.

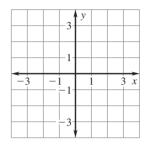
10.
$$y - x < 6$$



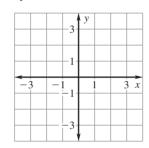
11.
$$x - y > -4$$



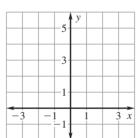
12.
$$2y - x < 2$$



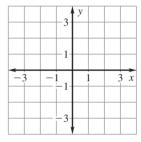
13.
$$4y \le 6x - 2$$



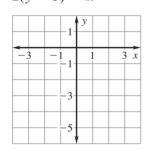
14.
$$5y \le 10x + 15$$



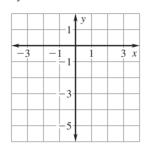
15.
$$6y + 3 \ge -18x$$



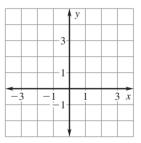
16.
$$2(y+3) < 4x$$



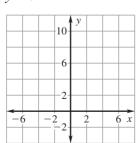
17.
$$2y - 3x \ge -8$$



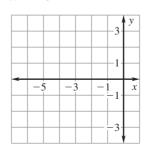
18.
$$2(x - y) < -5$$



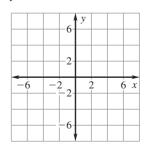
19.
$$y > 7$$



20.
$$x \le -5$$



21.
$$y < -4$$

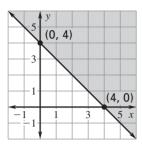


LESSON 5.7 Practice B continued

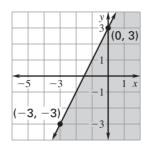
For use with the lesson "Graph Linear Inequalities in Two Variables"

Write an inequality of the graph shown.

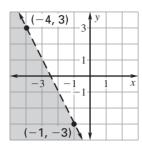
22.



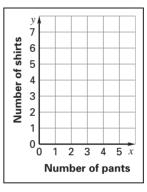
23.



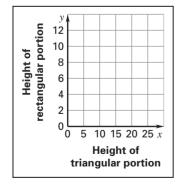
24.

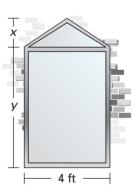


- **25. Clothes** You are going clothes shopping and can spend at most \$130 on clothes. It costs \$30 for a pair of pants and \$22 for a shirt. Let *x* represent the number of pants you can buy. Let *y* represent the number of shirts you can buy.
 - **a.** Write and graph an inequality that describes the different number of shirts and pants you can buy.
 - **b.** Give three possible combinations of pants and shirts that you can buy.



- **26. Window** The area of the window shown is less than 42 square feet. Let *x* and *y* represent the heights of the triangular and rectangular portions of the window, respectively.
 - **a.** Write and graph an inequality that describes the different dimensions of the window.
 - **b.** Could the height of the triangular portion be 2 feet and the height of the rectangular portion be 8 feet?





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