Name_____ Class _____ Date_____

2-8 Practice

Form G

Two-Variable Inequalities

Graph each inequality.

1. $y < x$ **2.** $y \geq x$ **3.** $y > 2$ **4.** $y < 2$

5. $x \leq 2$ **6.** $-2y \leq -x - 2$ **7.** $-2x - y - 1$ **8.** $y \geq 3x - 4$

9. You have a $25 calling card. Calls made using the card within the United States cost $.10 per minute while calls made from the US to France cost $.25 per minute.

a. Write an inequality that relates the number of minutes x you can use for calls within the U.S. and the number of minutes y you can use for calls from the U.S. to France.

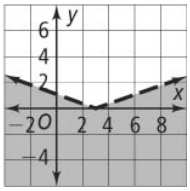
b. Graph the inequality.

Graph each absolute value inequality.

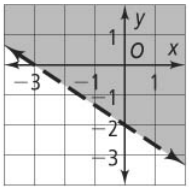
10. $y \geq |x|$ **11.** $y > |x + 2|$ **12.** $y \leq |x - 2|$ **13.** $y > |x| + 2$

Write an inequality for each graph. The equation for the boundary line is given.

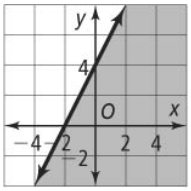
14. $y - 2x = 4$



15. $-2x - 3y = 6$



16. $3y = |x - 3|$



Name_____ Class _____ Date _____

2-8 Practice (continued)

Form G

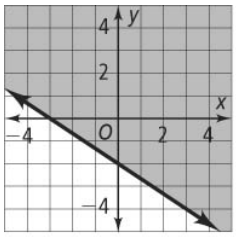
Two-Variable Inequalities

Graph each inequality on a coordinate plane.

17. $4x + 2y \leq 8$ **18.** $3x \leq 5y$ **19.** $y > -\frac{1}{6}x - 1$ **20.** $y \geq \left|\frac{1}{6}x\right| - 3$

Write an inequality for each graph.

21.



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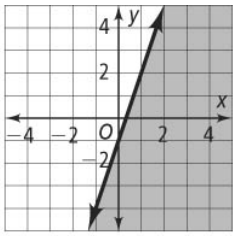

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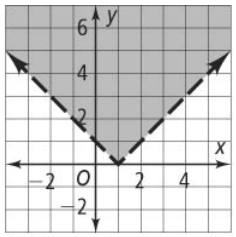

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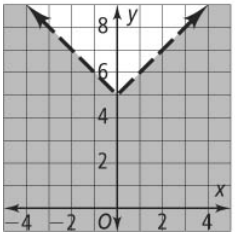

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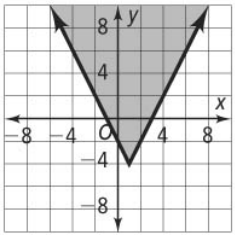

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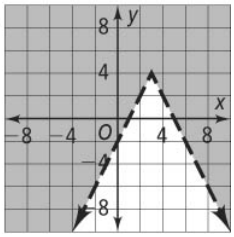

27. Open-Ended Write an inequality that includes (0, 9), (–10, 10), (10, –20), and (–20, 15) as solutions.

28. A salesperson sells two models of vacuum cleaners. One brand sells for $150 each and the other sells for $200 each. The salesperson has a weekly sales goal of at least $1800.

a. Write an inequality relating the revenue from the vacuum cleaners to the sales goal.

b. Graph the inequality.

c. If the salesperson sold exactly six $200 models last week, how many $150 models did she have to sell to make her sales goal?