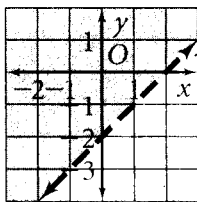


Practice 2-8

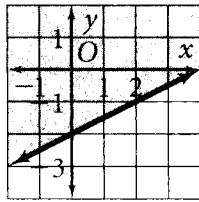
Two-Variable Inequalities

Write an inequality for each graph. In each case, the equation for the boundary line is given.

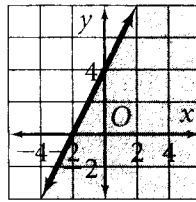
1. $y = x - 2$



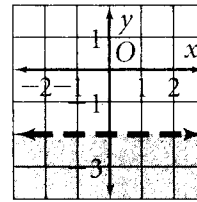
2. $x - 2y = 4$



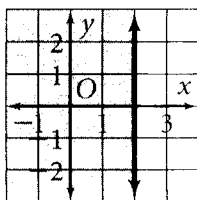
3. $y - 2x = 4$



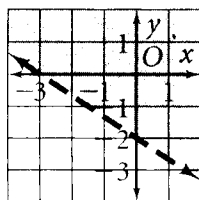
4. $y = -2$



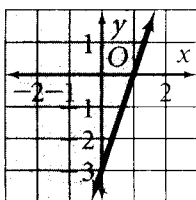
5. $x = 2$



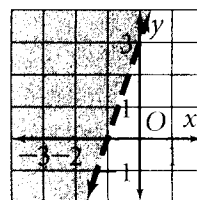
6. $-2x - 3y = 6$



7. $3x - y = 3$



8. $y - 3x = 3$



Graph each inequality on a coordinate plane.

9. $y < x$

10. $y \geq x$

11. $y > 2$

12. $y < 2$

13. $x \leq 2$

14. $x > 2$

15. $y \geq |x|$

16. $y > -2x + 1$

17. $y \geq 3x - 4$

18. $4x + 2y \leq 8$

19. $4x - 2y \leq 4$

20. $4y - 2x \geq 4$

21. $y > |x + 2|$

22. $y \leq |x - 2|$

23. $y > |x| + 2$

24. $y < |x| - 2$

25. $y \leq |4x| + 1$

26. $y \geq \left| \frac{1}{6}x \right| - 3$

27. $y > -\frac{1}{6}x - 1$

28. $3x \leq 5y$

29. You need to make at least 150 sandwiches for a picnic. You are making tuna sandwiches and ham sandwiches.

a. Write an inequality for the number of sandwiches you can make.

b. Graph the inequality.

c. Does the point (90, 80) satisfy the inequality? Explain.

30. 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?

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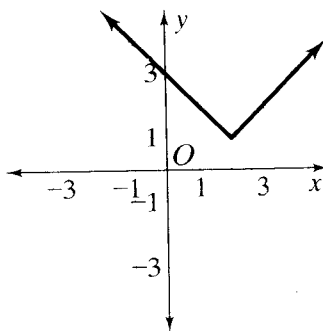
FCAT Practice

Benchmark MA.D.1.4.1

Multiple Choice

Which of the following functions is represented by the graph at the right?

- A. $y = |x - 2| - 1$
- B. $y = |x - 2| + 1$
- C. $y = -|x - 2| + 1$
- D. $y = -|x + 2| - 1$



- (A) (B) (C) (D)

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