

LESSON
5.2**Practice A**

For use with the lesson "Solve Inequalities Using Multiplication and Division"

Tell which property you would use to solve the inequality.

1. $8m < 64$

2. $\frac{x}{3} \geq -1$

3. $10 \leq -2y$

4. $-\frac{p}{3} > 7$

Match the equivalent inequalities.

5. $4x < 8$

A. $x < -2$

6. $-4x > 8$

B. $x > -2$

7. $-4x < -8$

C. $x < 2$

8. $2x > -4$

D. $x > 2$

Match the verbal sentence with the inequality. Then solve the inequality.9. The product of 3 and x is less than 9.

A. $9x < 3$

10. The quotient of x and 9 is greater than 3.

B. $\frac{x}{9} > 3$

11. The product of 9 and x is less than 3.

C. $3x < 9$

Solve the inequality. Graph your solution.

12. $4x \geq 24$



13. $3b < -21$



14. $-2m > 20$



15. $\frac{p}{3} \leq 5$



16. $\frac{n}{2} > -4$



17. $\frac{y}{-4} \geq 1$



18. $-6z < 36$



19. $\frac{1}{3}d > -2$



LESSON
5.2
Practice A *continued*
For use with the lesson "Solve Inequalities Using Multiplication and Division"

Write the verbal sentence as an inequality. Then solve the inequality and graph your solution.

20. The product of 5 and y is less than or equal to 15.



21. The product of 9 and b is greater than -36 .



22. The product of 2 and m is greater than or equal to 12.



23. The product of -1 and p is less than 5.



24. The product of -4 and z is greater than or equal to -1 .



25. **School Carnival** You are in charge of purchasing helium balloons for a school carnival. You have been given \$40 to buy the balloons. The balloons cost \$1.60 each.

- Write and solve an inequality that gives the possible numbers b of balloons you can buy.
- What is the greatest number of balloons that you can buy?

26. **Speed Reading** You want to improve your reading speed to at least 300 words per minute. You have been working on reading faster and want to test yourself by reading for 5 minutes.

- Write and solve an inequality that gives the possible numbers w of words you can read in 5 minutes.
- What is the least number of words that you could read in 5 minutes in order to reach your goal?

27. **Road Trip** You and three of your friends plan to rent a car for a road trip. The group budget is \$350. The group decides to split the cost of the rental equally.

- Write and solve an inequality that gives the cost c in dollars that each person will pay.
- What is the greatest amount of money that each of you can spend?