Name _____ Date _____

LESSON 6.3

Practice A

For use with pages 369–374

What is the first step you would use to solve the inequality?

1. $8x + 6 < 1$

2. $-10 > 3a - 5$

3. $2(y - 1) \geq 9$

4. $2(p - 5) < 13$

5. $4n - 3 > 2n$

6. $6b + 1 \geq 9 - 4b$

Match the verbal sentence with the inequality.

7. Three more than 2 times a number x is greater than 27.

8. Twice the sum of 3 and a number x is greater than 27.

9. Three times the sum of 2 and a number x is greater than 27.

10. Two more than 3 times a number x is greater than 27.

A. $2 + 3x > 27$

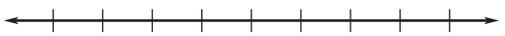
B. $3 + 2x > 27$

C. $2(3 + x) > 27$

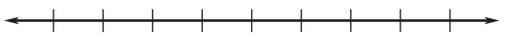
D. $3(2 + x) > 27$

Solve the inequality. Graph your solution.

11. $2x + 4 \geq 6$



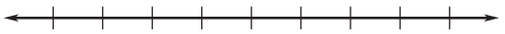
12. $3p - 1 < 5$



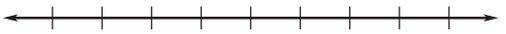
13. $5n + 8 \geq -7$

14. $4a - 9 \leq -25$

15. $-2y + 3 \geq 3$



16. $-1 - 4c < 3$

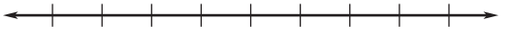


17. $5(m + 1) \leq 20$

18. $3(p - 2) > 6$

19. $7(x - 4) \leq 0$

20. $4(w + 6) \geq 60$



Name _____ Date _____

LESSON 6.3

Practice A *continued*

For use with pages 369–374

Solve the inequality, if possible.

21. $6x + 2 \leq 5x + 2$

22. $4y + 1 > y - 8 + 3y$

23. $2x - 8 + 3x \geq 5x - 4$

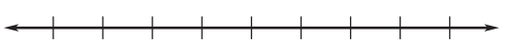
24. $3(b - 1) < 3b + 3$

25. $9a - 6a + 1 \leq 1 + 3a$

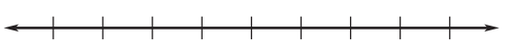
26. $8y + 10 > 2(4y + 7) - 3$

Translate the verbal phrase into an inequality. Then solve the inequalilty and graph your solution.

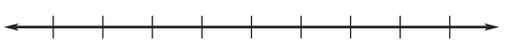
27. The sum of $4x$ and 7 is less than or equal to 39.



28. Three times the difference of x and 2 is greater than -21.



29. The sum of $5x$ and $8x$ is less than the sum of $4x$ and 27.



30. **Greeting Cards** Your school club is making greeting cards to raise money for a trip. You spend \$60 on supplies and plan to sell the cards for \$2 each.

a. Write an inequality that gives the possible numbers c of cards you need to sell in order for the profit to be positive.

b. What are the possible numbers of cards you need to sell in order for the profit to be positive?

31. **Gasoline** A grocery store chain that owns gasoline stations is offering its customers a deal. For every \$50 customers spend on groceries, the service station charges \$.10 less per gallon of gasoline.

a. If gasoline costs \$2.15 per gallon, how much will it cost per gallon if you spend \$50 at the grocery store?

b. Write an inequality that gives the possible numbers g of gallons of gasoline you can buy if you spend exactly \$50 on groceries and want to spend at most \$60 on groceries and gasoline.

c. What are the possible numbers of whole gallons of gasoline you can buy?