Name _____ Class _____ Date _____

Practice 4-5

Solve each compound inequality and graph the solution.

1. $-5 < s + 5 < 5$

2. $1 < 3x + 4 < 10$

3. $k - 3 > 1$ or $k - 3 < -1$

4. $b - 2 > 18$ or $3b < 54$

5. $-4d > 8$ and $2d > -6$

6. $-4 < t + 2 < 4$

7. $-3 < 3 + s < 7$

8. $3j \geq 6$ or $3j \leq -6$

9. $-1 < \frac{1}{2}x < 1$

10. $g + 2 > -1$ or $g - 6 < -9$

11. $-6 < 9 + 3y < 6$

12. $3f > 15$ or $2f < -4$

13. $d - 3 > 4$ or $d - 3 < -4$

14. $1 > 2h + 3 > -1$

15. $7 + 2a > 9$ or $-4a > 8$

16. $2z > 2.1$ or $3z < -5.85$

17. $c - 1 \geq 2$ or $c - 1 \leq -2$

18. $h + 2.8 < 1.8$ or $h + 2.8 > 4.8$

**Write and solve a compound inequality that represents each situation.
Graph your solution.**

19. The crowd that heard the President speak was estimated to be 10,000 people. The actual crowd could be 750 people more or less than this. What are the possible values for the actual crowd size?

20. Susie has designed an exercise program for herself. One part of the program requires her to walk between 25 and 30 miles each week. She plans to walk the same distance each day five days a week. What is the range of miles that she should walk each day?

21. A box of cereal must weigh more than 629.4 g and less than 630.6 g to pass inspection. The box in which the cereal is packaged weighs 5.5 g. What are the possible weights for the cereal?

22. Carmen works in a sporting goods store. Her goal is to sell between $500 and $600 worth of sporting equipment every week. So far this week, she has sold $395 worth of equipment. During the rest of the week, what dollar amount must Carmen sell in order to reach her goal?

Solve each compound inequality and graph the solution.

23. $2n - 1 \geq 1$ or $2n - 1 \leq -1$

24. $2k - 3 > 3$ or $2k - 3 < -3$

25. $-1 < h - 2 < 1$

26. $2.2 + p > 1$ and $1.5p < -0.3$

27. $9 < x + 2 < 11$

28. $5m + 8 < 23$ or $6m > 48$

29. $-3 \leq \frac{3}{2}x + 6 \leq 3$

30. $7 > 5 - x > 6$

31. $\frac{1}{2}x + 1 > 1$ or $\frac{1}{2}x + 1 < -1$

32. $-2 \leq s - 4 \leq 2$

33. $w - 3 > 4$ or $w - 3 < -4$

34. $6 > 4x - 2 > -6$

35. $t + 5 < 2$ or $3t + 1 > 10$

36. $2g > 12$ and $3g < 24$

37. $6x - 3 \geq 3$ or $6x - 3 \leq -3$

38. $2y - 3 > -1$ or $5 - y > 4$