

Solve each inequality and graph the solutions.

16. $x + 4 \leq 2$ 17. $-12 + q > 39$ 18. $x + \frac{3}{5} < 7$ 19. $4.8 \geq p + 4$
 20. $-12 \leq x - 12$ 21. $4 < 206 + c$ 22. $y - \frac{1}{3} > \frac{2}{3}$ 23. $x + 1.4 \geq 1.4$



Health



Special-effects contact lenses are sometimes part of costumes for movies. All contact lenses should be worn under an eye doctor's supervision.

24. Use the inequality $s + 12 \geq 20$ to fill in the missing numbers.

- a. $s \geq \square$ b. $s + \square \geq 30$ c. $s - 8 \geq \square$

25. **Health** A particular type of contact lens can be worn up to 30 days in a row. Alex has been wearing these contact lenses for 21 days. Write, solve, and graph an inequality to show how many more days Alex could wear his contact lenses.

Solve each inequality and match the solutions to the correct graph.

26. $1 \leq x - 2$ A.
27. $8 > x - (-5)$ B.
28. $x + 6 > 9$ C.
29. $-4 \geq x - 7$ D.

30. **Estimation** Is $x < 10$ a reasonable estimate for the solutions to the inequality $11.879 + x < 21.709$? Explain your answer.

31. **Sports** At the Seattle Mariners baseball team's home games, there are 45,611 seats in the four areas listed in the table. Suppose all the suite level and club level seats during a game are filled. Write and solve an inequality to determine how many people p could be sitting in the other types of seats.

Mariners Home Game Seating	
Type of Seat	Number of Seats
Main bowl	24,399
Upper bowl	16,022
Club level	4,254
Suite level	936



32. **Critical Thinking** Recall that in Chapter 2 a balance scale was used to model solving equations. Describe how a balance scale could model solving inequalities.

33. **Critical Thinking** Explain why $x + 4 \geq 6$ and $x - 4 \geq -2$ have the same solutions.



34. **Write About It** How do the solutions of $x + 2 \geq 3$ differ from the solutions of $x + 2 > 3$? How do the graphs of the solutions differ?

MULTI-STEP TEST PREP



35. This problem will prepare you for the Multi-Step Test Prep on page 188.
- Daryl finds that the distance from Columbus, Ohio, to Washington, D.C., is 411 miles. What is the round-trip distance?
 - Daryl can afford to drive a total of 1000 miles. Write an inequality to show the number of miles m he can drive while in Washington, D.C.
 - Solve the inequality and graph the solutions on a number line. Show that your answer is reasonable.