



## GUIDED PRACTICE

Solve each inequality and graph the solutions.

SEE EXAMPLE 1

1.  $2m + 1 > 13$

2.  $2d + 21 \leq 11$

3.  $6 \leq -2x + 2$

4.  $4c - 7 > 5$

5.  $\frac{4+x}{3} > -4$

6.  $1 < 0.2x - 0.7$

7.  $\frac{3-2x}{3} \leq 7$

8.  $2x + 5 \geq 2$

SEE EXAMPLE 2

9.  $4(x+2) > 6$

10.  $\frac{1}{4}x + \frac{2}{3} < \frac{3}{4}$

11.  $4 - x + 6^2 \geq 21$

12.  $4 - x > 3(4 - 2)$

13.  $0.2(x - 10) > -1.8$

14.  $3(j + 41) \leq 35$

SEE EXAMPLE 3

15. **Business** A sales representative is given a choice of two paycheck plans. One choice includes a monthly base pay of \$300 plus 10% commission on his sales. The second choice is a monthly salary of \$1200. For what amount of sales would the representative make more money with the first plan?

## PRACTICE AND PROBLEM SOLVING

Solve each inequality and graph the solutions.

## Independent Practice

For Exercises	See Example
16–27	1
28–36	2
37	3



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Online Extra Practice

16.  $4r - 9 > 7$

17.  $3 \leq 5 - 2x$

18.  $\frac{w+3}{2} > 6$

19.  $11w + 99 < 77$

20.  $9 \geq \frac{1}{2}v + 3$

21.  $-4x - 8 > 16$

22.  $8 - \frac{2}{3}z \leq 2$

23.  $f + 2\frac{1}{2} < -2$

24.  $\frac{3n-8}{5} \geq 2$

25.  $-5 > -5 - 3w$

26.  $10 > \frac{5-3p}{2}$

27.  $2v + 1 > 2\frac{1}{3}$

28.  $4(x+3) > -24$

29.  $4 > x - 3(x+2)$

30.  $-18 \geq 33 - 3h$

31.  $-2 > 7x - 2(x-4)$

32.  $9 - (9)^2 > 10x - x$

33.  $2a - (-3)^2 \geq 13$

34.  $6 - \frac{x}{3} + 1 > \frac{2}{3}$

35.  $12(x-3) + 2x > 6$

36.  $15 \geq 19 + 2(q-18)$

37. **Communications** One cell phone company offers a plan that costs \$29.99 and includes unlimited night and weekend minutes. Another company offers a plan that costs \$19.99 and charges \$0.35 per minute during nights and weekends. For what numbers of night and weekend minutes does the second company's plan cost more than the first company's plan?

Solve each inequality and graph the solutions.

38.  $-12 > -4x - 8$

39.  $5x + 4 \leq 14$

40.  $\frac{2}{3}x - 5 > 7$

41.  $x - 3x > 2 - 10$

42.  $5 - x - 2 > 3$

43.  $3 < 2x - 5(x+3)$

44.  $\frac{1}{6} - \frac{2}{3}m \geq \frac{1}{4}$

45.  $4 - (r-2) > 3 - 5$

46.  $0.3 - 0.5n + 1 \geq 0.4$

47.  $6^2 > 4(x+2)$

48.  $-4 - 2n + 4n > 7 - 2^2$

49.  $\frac{1}{4}(p-10) \geq 6 - 4$

50. Use the inequality  $-4t - 8 \leq 12$  to fill in the missing numbers.

a.  $t \geq \blacksquare$

b.  $t + 4 \geq \blacksquare$

c.  $t - \blacksquare \geq 0$

d.  $t + 10 \geq \blacksquare$

e.  $3t \geq \blacksquare$

f.  $\frac{t}{\blacksquare} \geq -5$