Exercises



GUIDED PRACTICE



1. 2m + 1 > 13 **2.** $2d + 21 \le 11$ **3.** $6 \le -2x + 2$ **4.** 4c - 7 > 5**5.** $\frac{4+x}{3} > -4$ **6.** 1 < 0.2x - 0.7 **7.** $\frac{3-2x}{3} \le 7$ **8.** $2x + 5 \ge 2$ 9. 4(x+2) > 610. $\frac{1}{4}x + \frac{2}{3} < \frac{3}{4}$ 11. $4 - x + 6^2 \ge 21$ 12. 4 - x > 3(4 - 2)13. 0.2(x - 10) > -1.814. $3(j + 41) \le 35$

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

Independer	nt Practice	Solve each inequality and graph the solutions.			
For Exercises	See Example	16. $4r - 9 > 7$	17. $3 \le 5 - 2x$	18	
16–27	1				
28–36	2	20. $9 \ge \frac{1}{2}v + 3$	21. $-4x - 8 > 16$	22	
27	2	2			

Extra Practice Skills Practice p. S9 Application Practice p. S30

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16.	4r - 9 > 7	17. $3 \le 5 - 2x$	18. $\frac{w+3}{2} > 6$	19. 11 <i>w</i> + 99 < 77
20.	$9 \ge \frac{1}{2}\nu + 3$	21. $-4x - 8 > 16$	22. $8 - \frac{2}{3}z \le 2$	23. $f + 2\frac{1}{2} < -2$
24.	$\frac{3n-8}{5} \ge 2$	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.	$-18 \ge 33 - 3h$
31.	-2 > 7x - 2(x - 4)	4) 32. $9 - (9)^2 >$	→ 10 <i>x</i> − <i>x</i> 33.	$2a - (-3)^2 \ge 13$
34.	$6 - \frac{x}{3} + 1 > \frac{2}{3}$	35. $12(x-3)$	+2x > 6 36.	$15 \ge 19 + 2(q - 18)$

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. $5x + 4 \le 14$	40. $\frac{2}{3}x - 5 > 7$
41. $x - 3x > 2 - 10$	42. $5 - x - 2 > 3$	43. $3 < 2x - 5(x + 3)$
44. $\frac{1}{6} - \frac{2}{3}m \ge \frac{1}{4}$	45. $4 - (r - 2) > 3 - 5$	46. $0.3 - 0.5n + 1 \ge 0.4$
47. $6^2 > 4(x+2)$	48. $-4 - 2n + 4n > 7 - 2^2$	49. $\frac{1}{4}(p-10) \ge 6-4$
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50. Use the inequality $-4t - 8 \le 12$ to fill in the missing numbers.

a. $t \ge$	b. $t + 4 \ge$	c. $t - m \ge 0$
d. $t + 10 \ge$	e. 3 <i>t</i> ≥	f. $\frac{t}{-5} \ge -5$