

CUMULATIVE REVIEW

Chapters 1–7

Evaluate the expression.

1. $2^5 \cdot 2 - 4 \div 2$ (p. 8)

4. $\sqrt{144}$ (p. 110)

2. $24 \div 6 + (9 - 6)$ (p. 8)

5. $-\sqrt{2500}$ (p. 110)

3. $5[(6 - 2)^2 - 5]$ (p. 8)

6. $\pm\sqrt{400}$ (p. 110)

Check whether the given number is a solution of the equation or inequality. (p. 21)

7. $7 + 3x = 16$; 3

10. $g - 3 > 2$; 5

8. $21y + 1 = 1$; 0

11. $10 \geq 4 - x$; 0

9. $20 - 12h = 12$; 1

12. $30 - 4p \geq 5$; 6

Simplify the expression.

13. $5(y - 1) + 4$ (p. 96)

16. $\frac{10h - 25}{5}$ (p. 103)

14. $12w + (w - 2)3$ (p. 96)

17. $\frac{21 - 4x}{-7}$ (p. 103)

15. $(g - 1)(-4) + 3g$ (p. 96)

18. $\frac{32 - 20m}{2}$ (p. 103)

Solve the equation.

19. $x - 8 = 21$ (p. 134)

22. $\frac{x}{3} = 8$ (p. 134)

25. $3(x - 2) = -15$ (p. 148)

20. $-1 = x + 3$ (p. 134)

23. $5 - 2x = 11$ (p. 141)

26. $3(5x - 7) = 5x - 1$ (p. 154)

21. $6x = -42$ (p. 134)

24. $\frac{2}{3}x - 3 = 17$ (p. 141)

27. $-7(2x - 10) = 4x - 10$ (p. 154)

Graph the equation.

28. $x + 2y = -8$ (p. 225)

31. $y = 3x - 7$ (p. 244)

29. $-2x + 5y = -10$ (p. 225)

32. $y = x + 6$ (p. 244)

30. $3x - 4y = 12$ (p. 225)

33. $y = -\frac{1}{3}x$ (p. 253)

Write an equation of the line in slope-intercept form with the given slope and y -intercept. (p. 283)

34. slope: 5
 y -intercept: -1

35. slope: -1
 y -intercept: 3

36. slope: -7
 y -intercept: 0

Write an equation in point-slope form of the line that passes through the given points. (p. 302)

37. (1, -10), (-5, 2)

38. (4, 7), (-4, 3)

39. (-9, -2), (-6, 8)

40. (-1, 1), (1, -3)

41. (2, 4), (8, 2)

42. (-6, 1), (3, -5)

Solve the inequality. Then graph your solution.

43. $x - 9 < -13$ (p. 356)

44. $8 \leq x + 7$ (p. 356)

45. $8x \geq 56$ (p. 363)

46. $\frac{x}{-4} > 7$ (p. 363)

47. $1 - 2x < 11$ (p. 369)

48. $8 > -3x - 1$ (p. 369)

49. $4x - 10 \leq 7x + 8$ (p. 369)

50. $7x - 5 < 6x - 4$ (p. 369)

51. $-4 < 3x - 1 < 5$ (p. 380)

52. $3 \leq 9 - 2x \leq 15$ (p. 380)

53. $|3x| < 15$ (p. 398)

54. $|4x - 2| \geq 18$ (p. 398)