

Cumulative Review—Chapters 1–3**Simplify.**

1. $|9| - |-3|$ _____

2. $18 \div 3(6 - 5)$ _____

3. $12 - (7 - 3)$ _____

4. $3 + 4(5 + 6)$ _____

5. $-31 - 4 + 12 - 6$ _____

6. $-3(a - b) + 5b$ _____

7. $-3(33)\left(\frac{1}{3}\right)\left(-\frac{1}{11}\right)$ _____

8. $2\frac{2}{3} - 3\frac{1}{3} - 3\frac{1}{3}$ _____

9. $6x - (3 - x)$ _____

10. $6x - (x - 3)$ _____

Evaluate each expression if $a = 5$, $b = -3$, and $c = -2$.

11. $a + b - c$ _____

12. $a - b - |c|$ _____

13. $a(b - c)$ _____

14. $a - (b - c)$ _____

Evaluate each expression if $x = \frac{1}{2}$, $y = 0$, and $z = -1$.

15. xyz _____

16. $z - 2x$ _____

17. $\frac{xy}{x - z}$ _____

18. $\frac{z - 2}{x}$ _____

Solve.

19. $12 + x = -4$ _____

20. $2y = 19$ _____

21. $\frac{-r}{6} = -9$ _____

22. $|x| - 4 = -2$ _____

23. $2x - (3 + x) = 8$ _____

24. $2x - (3 - x) = 8$ _____

Solve. If an equation is an identity or has no solution, state that fact.

25. $9 + 3y = 21$ _____

26. $9 - 3y = 21$ _____

27. $3m + 4 = 4m - 6$ _____

28. $-32 + 4r = 18 - 6r$ _____

29. $n - 5 = -(5 - n)$ _____

30. $\frac{2}{5}x = -30$ _____

31. $3(y + 8) = 2\left(10 + \frac{3}{2}y\right)$ _____

32. $18 = 6 - 1.5y$ _____

(continued)

Cumulative Review—Chapters 1–3 (continued)

Write the given numbers in order from least to greatest.

33. $5, -6, -6\frac{1}{2}, \frac{5}{2}$ _____

34. $-1\frac{1}{2}, 0, -2, \frac{3}{4}$ _____

Name the property illustrated.

35. $9 \cdot 16 = 16 \cdot 9$ _____

36. If $3p = 11$, then $11 = 3p$. _____

Solve.

37. Seven more than a number is 3. Find the number. _____

38. Six less than twice a number is 10. Find the number. _____

39. The length of a rectangle is 1 m more than twice its width. What is the length of the rectangle if its perimeter is 110 m? _____

40. Find two consecutive odd integers whose sum is 76. _____

41. A baseball team played 109 games. It lost five more games than it won. How many games did it win? _____

42. Fred has three times as many dimes as quarters. How many dimes does he have if the value of all of the coins is \$3.85? _____