Cumulative Review (Chapters 1–3)

Simplify.

1. $45 - 2(16 - 6)$	2. $\frac{56 \div 7}{16}$	3. $48 \div (9 + 3)$
4. -21 - -14	5. 31 - [35 ÷ 5]	6. $48 \div 3 + 7(3)$
7. -55 - (-42 + 7)	8. $-22 + 31 + (-44) + 50$	9. $1\frac{1}{3} - 10\frac{1}{4} + 12\frac{2}{3}$
10. $2.4 + 5.1 - 6.3$	11. $9 + x - (5 - x) - 6$	12. $4(x + 3y) - 3(x - 4y)$
13. $-5(42)\left(-\frac{2}{5}\right)\left(-\frac{1}{3}\right)$	14. $-5(-a-b) + 5(a+b)$	15. $\frac{85xy}{5y}$; $y \neq 0$

Evaluate if w = 2, x = -3, $y = \frac{1}{2}$, and z = 3.

16. w = |z - x| **17.** $\frac{4y - x}{w + z}$ **18.** -5(x + w) **19.** -w + 2x + 4y

State the coordinate of the given point.

20. The point halfway between F and G.

21. The point halfway between *B* and *C*.

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

22. $ x = 3$	23. $ y = -2$	24. $x + 7 = 12$
25. $z + 1 = -3$	26. $y + 2 = 9$	27. $(x - 3) + 17 = 30$
28. $\frac{a}{3} = -14$	29. $9 = \frac{1}{2}q$	30. $2x + 6 = -2$
31. $\frac{1}{2}(2x+4) = 2x$	32. $16 = \frac{3}{4}k + 1$	33. $5(z-3) = 40$
34. $5y - 2 = 7y + 8$	35. $9(2 - b) = b$	36. $3(x-4) = 6(x-3)$

Solve.

- **37.** A honeydew melon costs four times as much as a peach. Together they cost \$1.50. How much does each cost?
- 38. Find three consecutive integers whose sum is 87.
- **39.** Thirty-eight employees at High Tech Sales ride to work on the subway. This represents $\frac{2}{5}$ of the employees. How many employees are there?
- **40.** Rory has 30 coins (all nickels and dimes). He has five times as many nickels as dimes. How much money does he have?