## Lesson 4-1

**Write each phrase as an algebraic expression.**

1. six less than $p$
2. twenty more than $c$
3. the quotient of $a$ and $b$
4. Juana's age plus 6
5. $x$ increased by twelve
6. $1,000 divided by $z$
7. 3 divided into $y$
8. the product of 7 and $m$
9. the difference of $f$ and 9
10. twenty-six less $q$
11. 19 decreased by $z$
12. two less than $x$
13. thirty-five increased by $a$
14. four hundred divided into $n$
15. Joe's height minus nineteen
16. twice as many lemons
17. eight more than $x$
18. the product of $m$ and $n$

**Write each sentence as an algebraic equation.**

19. Three times a number less four is 17.
20. The sum of a number and 6 is 5.
21. Twenty more than twice a number is $-30$.
22. The quotient of a number and $-2$ is $-42$.
23. Four plus three times a number is 18.
24. Five times a number minus 15 is 92.
25. Eight times a number plus twelve is 36.
26. The difference of a number and 24 is $-30$.
27. 42 more than five times a number is 156.
28. Thirteen and a number is 62.
29. The quotient of a number and $-4$ is $-324$.
30. The sum of a number and eleven is 41.

## Lesson 4-2

**Solve each equation. Check your solution.**

1. $r - 3 = 14$
2. $t + 3 = 21$
3. $s + 10 = 23$
4. $7 + a = -10$
5. $14 + m = 24$
6. $-9 + n = 13$
7. $s - 2 = -6$
8. $6 + f = 71$
9. $x + 27 = 30$
10. $a - 7 = 23$
11. $-4 + b = -5$
12. $w + 18 = -4$
13. $k - 9 = -3$
14. $j + 12 = 11$
15. $-42 + v = -42$
16. $s + 1.3 = 18$
17. $t + 3.43 = 7.4$
18. $x + 7.4 = 23.5$
19. $p + 3.1 = 18$
20. $q - 2.17 = 21$
21. $w - 3.7 = 4.63$
22. $m - 4.8 = 7.4$
23. $x - 1.3 = 12$
24. $y + 3.4 = 18$
25. $0.013 + h = 4.0$
26. $7.2 + g = 9.1$
27. $z - 12.1 = 14$
28. $v - 18 = 13.7$
29. $w - 0.1 = 0.32$
30. $r + 6.7 = 1.2$

## Lesson 4-3

**Solve each equation. Check your solution.**

1. $2m = 18$
2. $-42 = 6n$
3. $72 = 8k$
4. $-20r = 20$
5. $420 = 5s$
6. $325 = 25t$
7. $-14 = -2p$
8. $18q = 36$
9. $40 = 10a$
10. $100 = 20b$
11. $416 = 4c$
12. $45 = 9d$
13. $0.5m = 3.5$
14. $1.8 = 0.6x$
15. $0.4y = 2$
16. $1.86 = 6.2z$
17. $-8x = 24$
18. $8.34 = 2r$
19. $1.67t = 10.02$
20. $243 = 27a$
21. $0.9x = 4.5$
22. $4.08 = 1.2y$
23. $8d = 112$
24. $5f = 180.5$
25. $59.66 = 3.14m$
26. $98.4 = 8p$
27. $208 = 26k$