## Elementary Algebra Skill

## Setting Up and Solving Number Problems Leading to Radical Equations

Set up and solve.

- **1.** The square root of a number is equal to 12. Find the number.
- 2. The square root of a number added to 4 gives 9. What is the number?
- 3. The difference of 21 and the square root of a number is 15. Find the number.
- 4. Twice the square root of a number gives 20. What is the number?
- 5. The quotient of 18 and the square root of a number is 3. Find the number.
- 6. The square root of a number less 10 yields -6. What is the number?
- 7. The square root of the sum of a number and 2 is 5. Find the number.
- 8. The square root of the difference of a number and 9 is 4. What is the number?
- 9. The square root of the sum of 3 and twice a number is 11. Find the number.
- **10.** The square root of the difference of eleven times a number and 2 is 8. What is the number?
- **11.** A number added to its square root gives 12. Find the number.
- 12. A number less its square root gives 20. What is the number?
- 13. A number increased by the square root of the sum of the number and 1 gives 11. Find the number.
- **14.** A number subtracted from the square root of the difference of a number and 3 yields –3. Find the number.
- 15. Twice a number plus the square root of the sum of three times the number and 4 gives -1. Find the number.

## Answers to Setting Up and Solving Number Problems Leading to Radical Equations

- ) 144
- ) 25
- ) 36
- ) 100
- ) 36
- ) 16
- ) 23
- ) 25
- ) 59
- ) 6
- ) 9
- ) 25
- ) 8
- ) 3 or 4
- ) 1