### Across

- **7.** For every real number a, b, and c.
- **9.** The nonnegative integers.
- **11.** A mathematical sentence that compares the values of two expressions using an inequality symbol.
- **12.** A number a such that $a^2 = b$. The square root of b is the principal square root. The negative square root.
- **13.** A mathematical phrase involving numbers and operation symbols, but no variables.
- **15.** A number that shows repeated multiplication.
- **17.** A number that cannot be written as a ratio of two integers. Irrational numbers in decimal form are nonterminating and nonrepeating.
- **18.** The numerical factor when a term has a variable.
- **19.** Algebraic expressions that have the same value for all values of the variables.
- **20.** Given a nonzero rational number $a/b$, the reciprocal, or multiplicative inverse, is $b/a$. The product of a nonzero number and its reciprocal is 1.

### Down

- **1.** Numbers whose square roots are integers.
- **2.** A number that is either rational or irrational.
- **3.** A symbol, usually a letter, that represents one or more numbers.
- **4.** A number that is the same distance from zero on the number line as a given number, but lies in the opposite direction.
- **5.** A mathematical sentence that uses an equal sign.
- **6.** A real number that can be written as a ratio of two integers. Rational numbers in decimal form are terminating or repeating.
- **8.** Whole numbers and their opposites.
- **10.** 1. Perform any operations inside grouping symbols. 2. Simplify powers. 3. Multiply and divide in order from left to right. 4. Add and subtract in order from left to right.
- **14.** The counting numbers.
- **16.** The expression under the radical sign is the radicand.