

# Inequality

An inequality is a mathematical statement in which one side is less than, greater than, or possibly equal to the other side. Inequalities use four different symbols—less than (<), less than or equal to  $(\leq)$ , greater than (>) and greater than or equal to  $(\geq)$ . For example, the inequality 10 < 20 states that 10 is less than 20.

## Prime Number

A prime number is a positive number that you can evenly divide only by itself and the number 1. For example, 2, 3, 5, 7, 11 and 13 are examples of prime numbers. The number 1 is not considered a prime number.

## Radical

A radical is a symbol ( $\sqrt{\phantom{a}}$ ) that tells you to find the root of a number. In algebra, you will commonly find the square root of numbers. To find the square root of a number, you need to determine which number multiplied by itself equals the number under the radical sign. For example,  $\sqrt{25}$  equals 5.

#### Integer

An integer is a whole number or a whole number with a negative sign (–) in front of the number. For example, –3, –2, –1, 0, 1, 2 and 3 are examples of integers.

#### Matrix

1 7 5 2 6 4 8 3 9 A matrix is a collection of numbers, called elements, which are arranged in horizontal rows and vertical columns. The collection of numbers is surrounded by brackets or parentheses. Matrices is the term used to indicate more than one matrix.

## Terms

Terms are numbers, variables or a combination of numbers and variables, which are separated by addition (+), subtraction (-), multiplication (\*) or  $(\cdot)$ , or division  $(\div)$  signs. For example, the expression xy contains one term, whereas the expression x + y contains two terms.

## Solve

When you are asked to solve a problem, you need to find the answer or answers to the problem. For example, when you solve the equation 2x - 6 = 0, you determine that x equals 3.

## System of Equations

A system of equations is a group of two or more related equations. You are often asked to find the value of each variable that solves all the equations in the group.

## Variable

A variable is a letter, such as x or y, which represents an unknown number. For example, if x represents Emily's age, then x + 5 represents the age of Emily's sister who is 5 years older.

# Polynomial

A polynomial is an expression that consists of one or more terms, which can be a combination of numbers and/or variables, that are added together or subtracted from one another. For example,  $2x^2 + 3x$  is a polynomial. A polynomial with only one term, such as 5x, is called a monomial. A polynomial with two terms, such as 5x + 7, is called a binomial. A polynomial with three terms, such as  $2x^2 + 5x + 7$ , is called a trinomial.