ALGEBRAIC EXPRESSION, statement of the equality of two expressions formulated by applying to a set of variables the algebraic operations,

namely, addition, subtraction, multiplication, division, raising to a power, and extraction of root. Examples are x2+ 1 and (y4x2+2xy-y) (x-1) = 12. An important special case of such equations is that of polynomial equations, expression of the form axn + bxn -1 + ... + gx + h = k. They have as many solutions as their degree(n), and the search for their solutions stimulated much of the development of classical and modern algebra. Equations like x sin(x) = c that involve nonalgebraic operations, such as logarithms or trigonometric functions, are said to be transcendental.