

Zitrus

In the field below you can enter a formula. SURFER then computes the associated surface and displays it. The formula on the right always equals zero.

The equation can contain the following elements:

Variables:

$$x, y, z,$$

Coefficients in form of numbers or parameters:

$$1, 2, 3, \dots a, b, c, \dots ,$$

Arithmetic operations:

$$+, -, \cdot \text{ and }$$

Exponents:

$$^2, ^3, ^n.$$

Every point of the coordinate system is represented by a value for each of the three variables x , y and z . If the term replacing the variables with the values of this point equals zero, then the point will be displayed. Through a method called *ray tracing* the programme finds all such points; they are called zeroes of the equation. All these points together then form the surface.