Given the equation x+y=0 it is said that it is a linear equation with 2 unknowns (x,y) and linear because there are not quadratic or higher terms.

This equation does not have a unique solution, meaning that there are more than one combination of values of x and y that satisfy the equation.

Possible solutions are: (1,−1),(2,−2),(100,−100), etc.

The equation:

$$x + y + 3t - z = 2$$

is also a linear equation, although now we have 4 unknowns.

Obviously it does not have a unique solution either.

More generally, a linear equation with n unknowns is defined as follows:

$$a_1x_1 + a_2x_2 + a_3x_3 + \ldots + a_nx_n = b$$

where:

1. $a_1, a_2, \ldots, a_n$ are called the coefficients.
2. $x_1, x_2, \ldots, x_n$ are the unknowns.
3. b is the constant term.

It is said, also, that two equations are equivalent when they have the same solution.

The equation 3x+3y=0, for example, is equivalent to x+y=0.