

An *implicit equation* is an equation which relates the variables involved. For example, the equation $x^2 + y^2 = 4$ gives a relationship between x and y , even though it does not specify y explicitly in the form $y = f(x)$.

As this example shows, it may not be possible to convert an implicit equation into an equation of the form $y = f(x)$ for some function $f(x)$, as the x values in the range $-2 < x < 2$ each correspond to two values for y .