

F2_RT12

The implicit equation

$$(x^2 + 2ay - a^2)^2 = y^2(a^2 - x^2)$$

represents a family of functions, with each member of the family corresponding to a different value of a .

Sketch some graphs of functions in this family corresponding to different values of a . You might want to rearrange the equation into the form $y = f(x)$ first.

What might be the domain of the function f ?

Relevance

F2 How can we represent a function by a graph, and how are key properties of a function visible on a graph?