
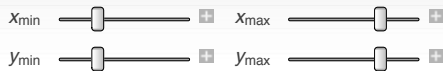
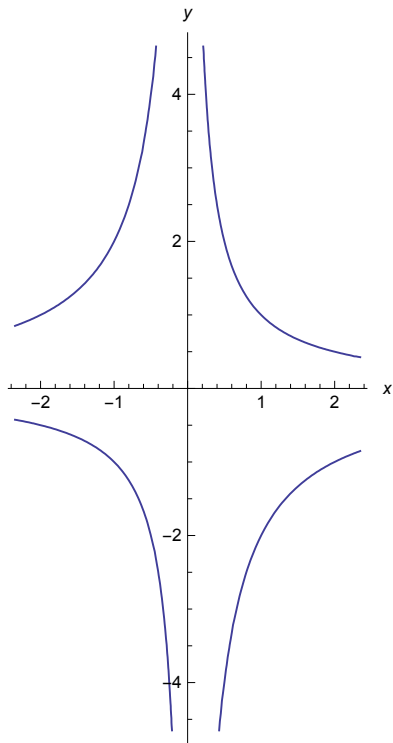


In[7]:=  $x^2 y^2 + x y = 2$

Input:

$$x^2 y^2 + x y = 2$$

Implicit plot:



Alternate forms:

$$x y (x y + 1) = 2$$
$$x^2 y^2 + x y - 2 = 0$$

Solutions:

$$x \neq 0, \quad y = -\frac{2}{x}$$
$$x \neq 0, \quad y = \frac{1}{x}$$

Integer solutions:

[More solutions](#) 

$$x = -2, \quad y = 1$$
$$x = -1, \quad y = -1$$
$$x = -1, \quad y = 2$$
$$x = 1, \quad y = -2$$
$$x = 1, \quad y = 1$$

Implicit derivatives:

[More](#) 

$$\frac{\partial x(y)}{\partial x} = x$$

$$\frac{\partial y}{\partial x} = -\frac{y}{x}$$