

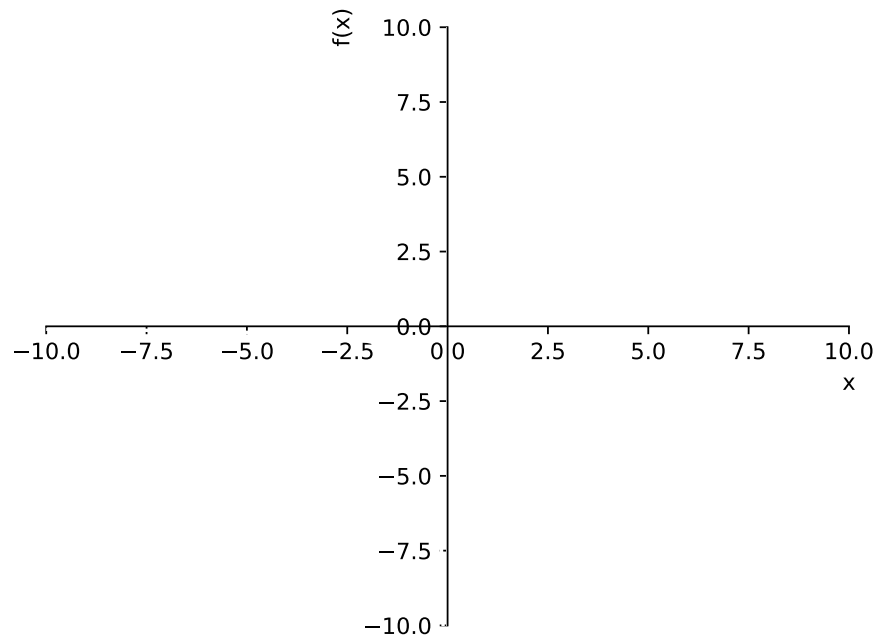
1 Graphing Functions

1.1 Questions

1. Sketch the graph of the following function:

$$y = \frac{1}{x} \quad (1)$$

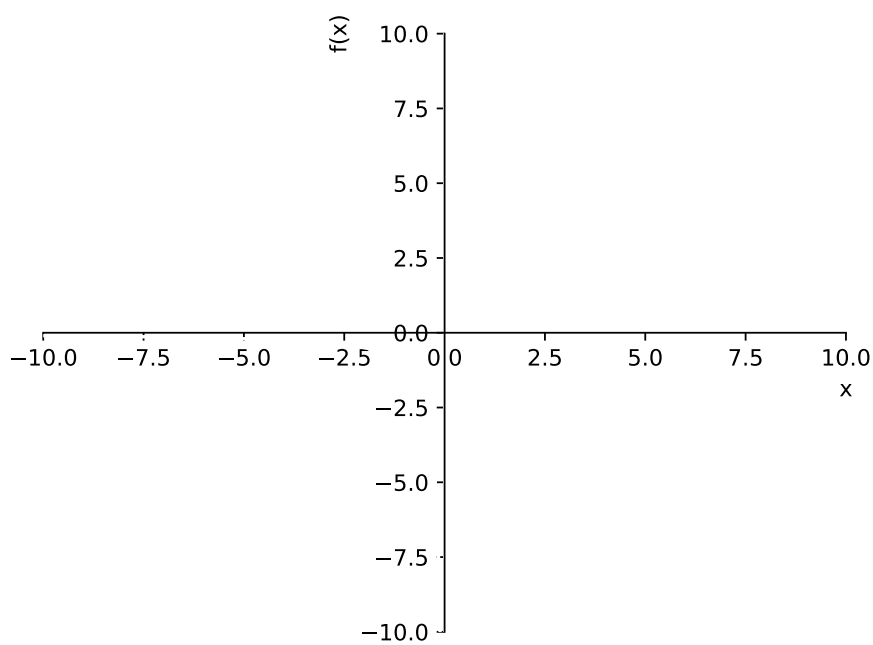
Solution:



2. Sketch the graph of the following function:

$$y = \frac{x}{(x-1)^2} \quad (2)$$

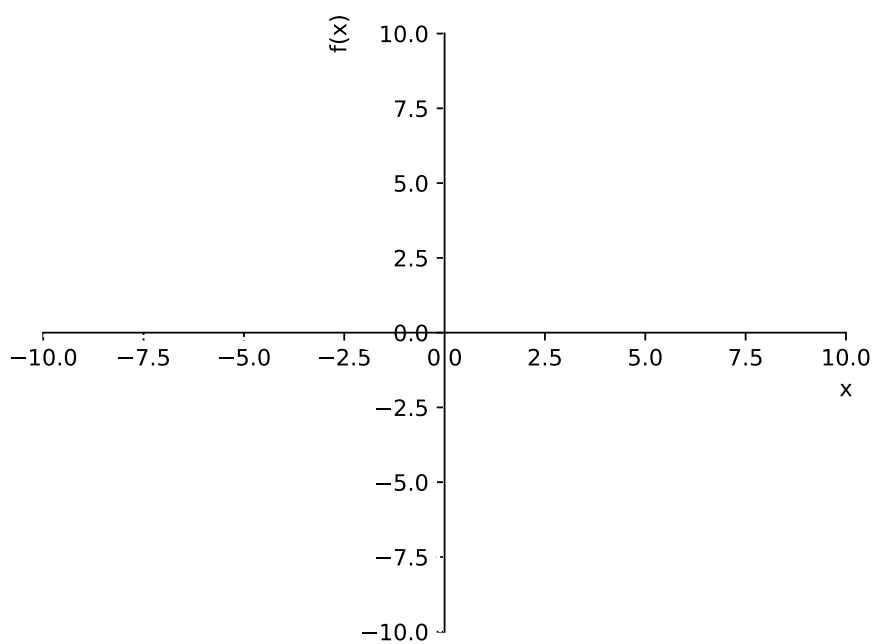
Solution:



3. Sketch the graph of the following function:

$$y = \frac{(x+1)^2}{(x-2)(x-1)} \quad (3)$$

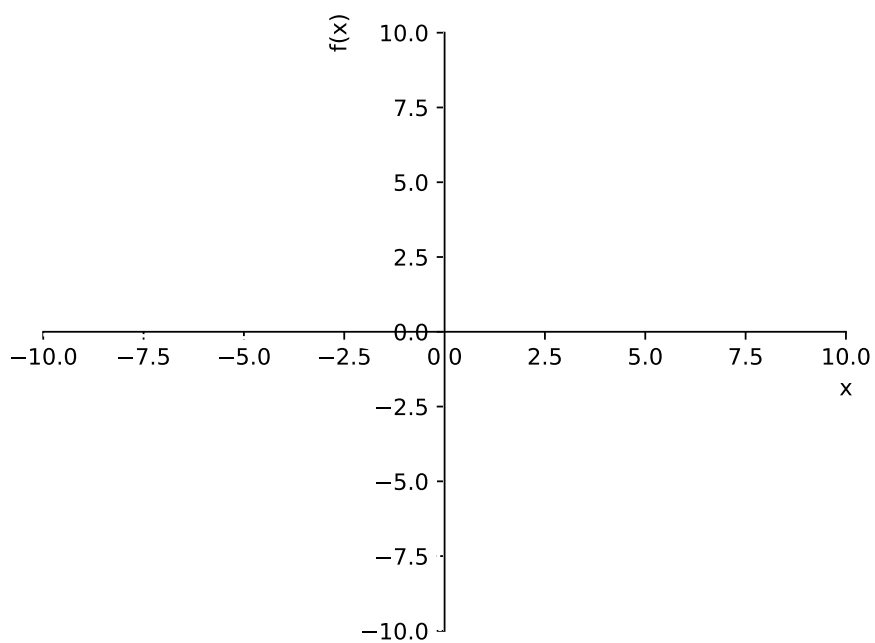
Solution:



4. Sketch the graph of the following function:

$$y = \frac{1}{x} (x^2 + 4) \quad (4)$$

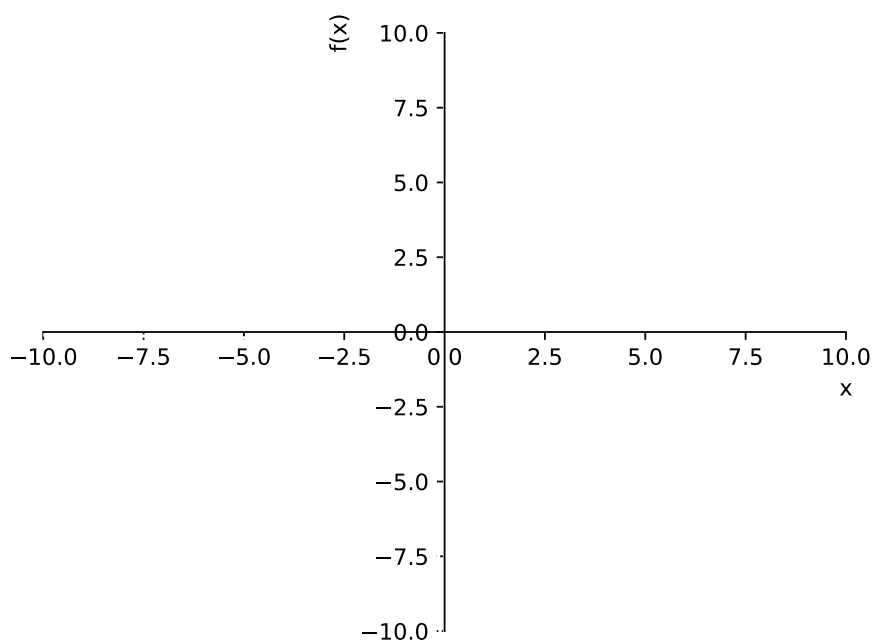
Solution:



5. Sketch the graph of the following function:

$$y = \frac{x+1}{-x+1} \quad (5)$$

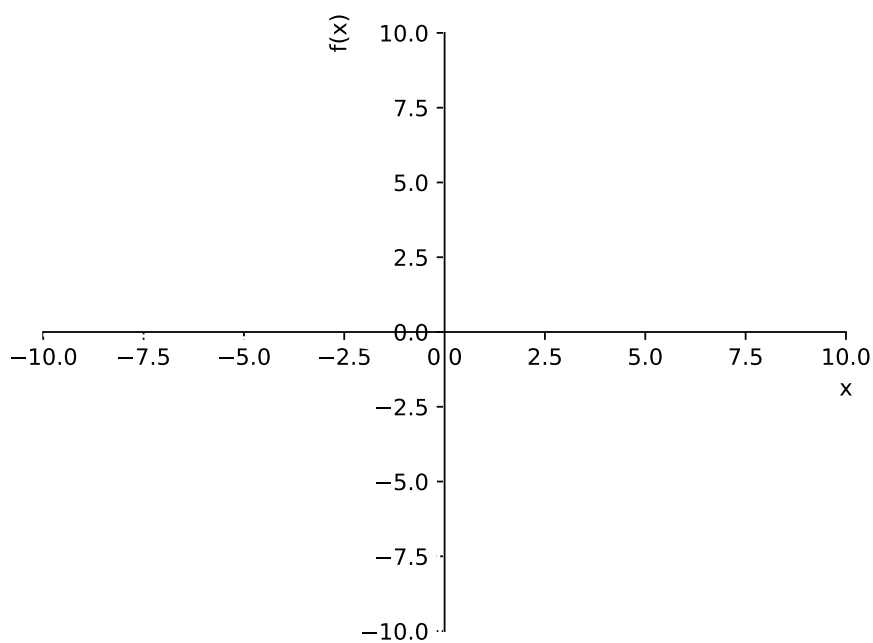
Solution:



6. Sketch the graph of the following function:

$$y = \frac{x - 1}{x + 1} \quad (6)$$

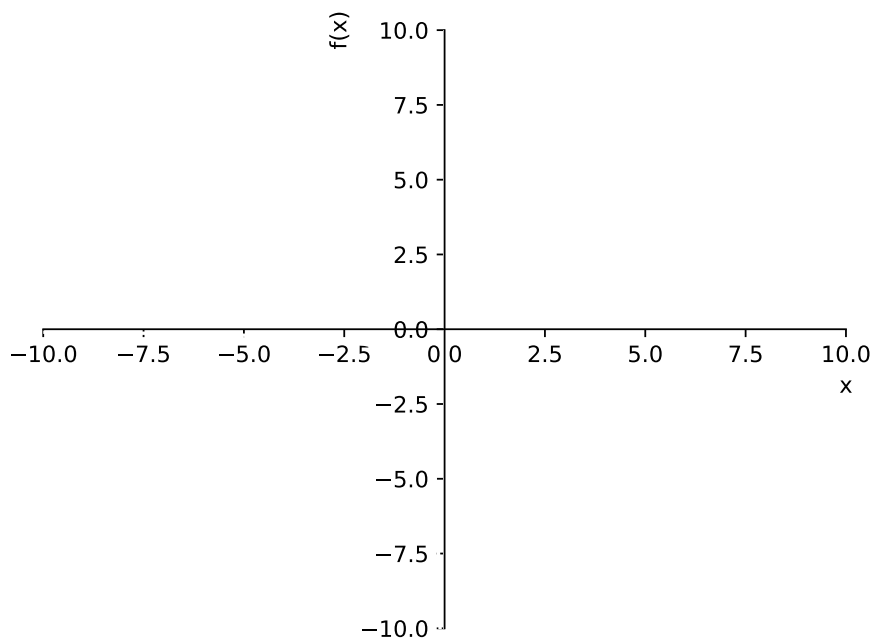
Solution:



7. Sketch the graph of the following function:

$$y = \frac{(x+1)(x+2)}{(x-2)(x-1)} \quad (7)$$

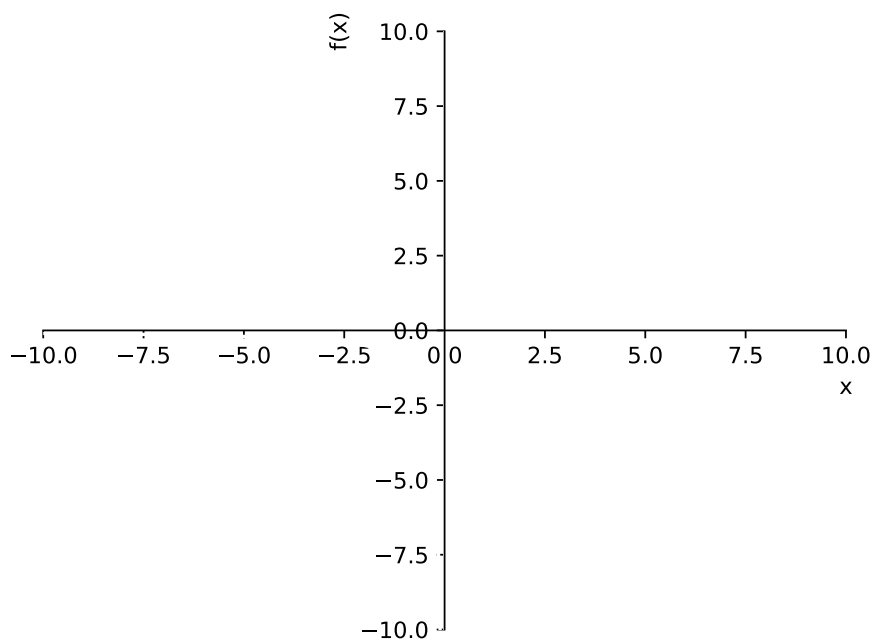
Solution:



8. Sketch the graph of the following function:

$$y = \frac{1}{x(x^2 + 1)} \quad (8)$$

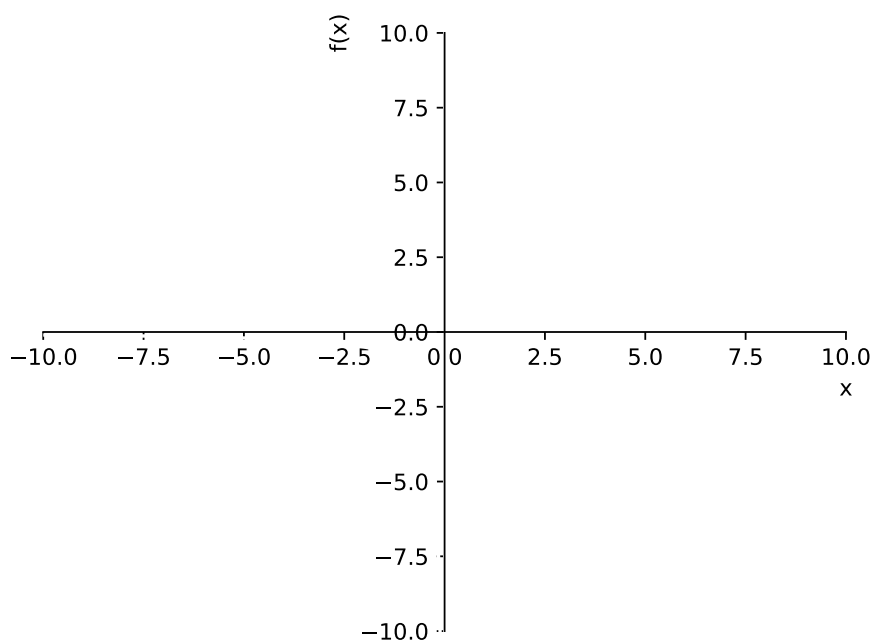
Solution:



9. Sketch the graph of the following function:

$$y = \frac{1}{x+1} (x-1) (x^2 + 2x + 1) \quad (9)$$

Solution:



10. Sketch the graph of the following function:

$$y = \sin\left(\frac{1}{x}\right) \quad (10)$$

Solution:

