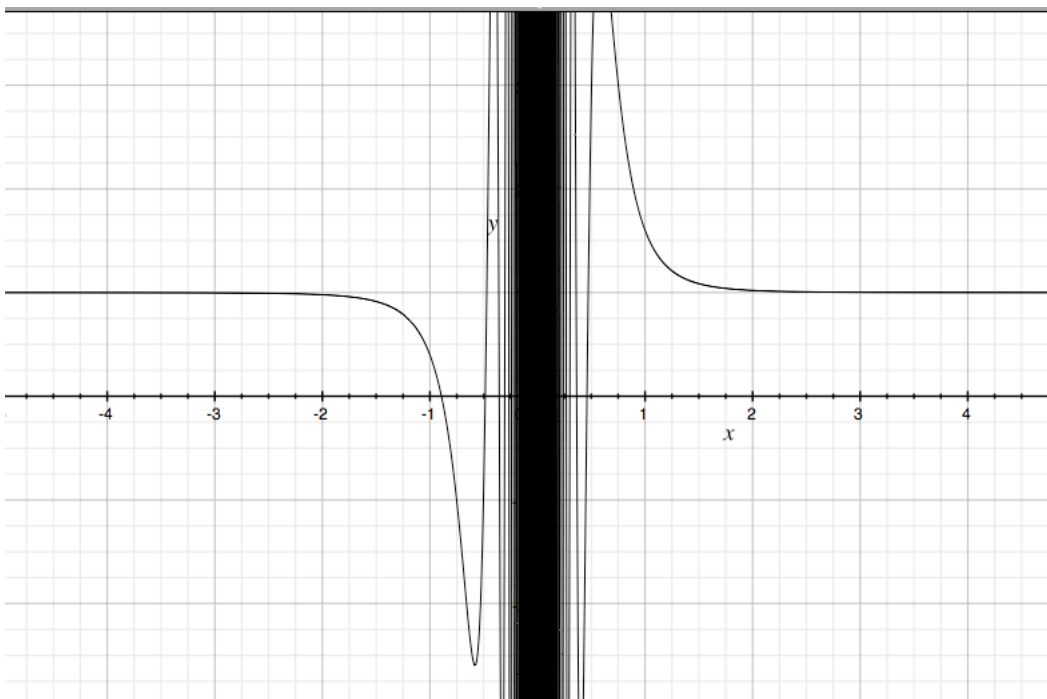


$$y = x + x^2 \sin\left(\frac{1}{x^2}\right)$$



$$y = 1 + 2x \sin\left(\frac{1}{x^2}\right) - \frac{2}{x} \cos\left(\frac{1}{x^2}\right)$$