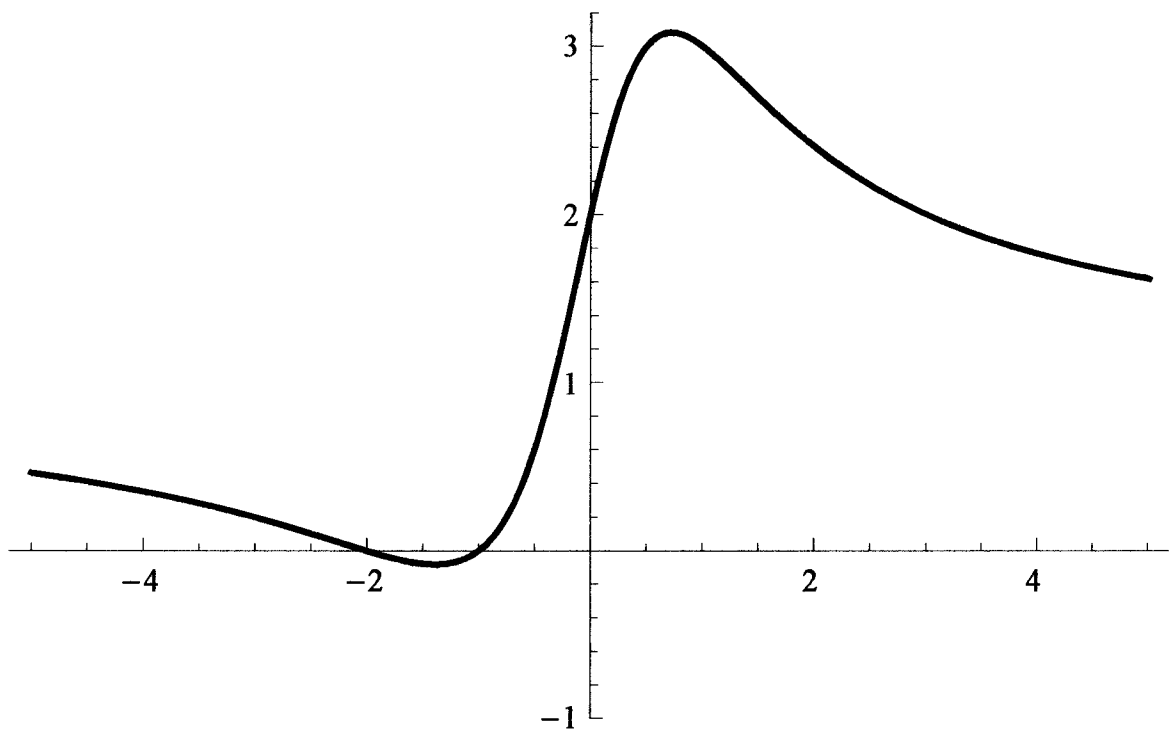


$$r(x) = \frac{x^2 + 3x + 2}{x^2 + 1}$$



Notice there are no vertical asymptotes, but there is a horizontal asymptote at $y=1$