## Chapter 1.6: Polynomials and Rational Functions Calculus I

College of the Atlantic. Fall 2022

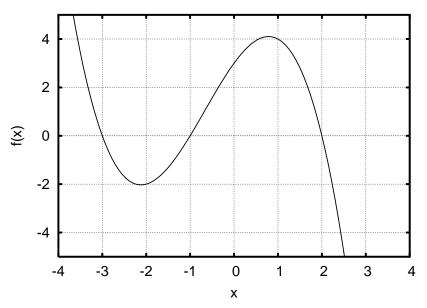


Figure 1: Determine a possible function for this graph.

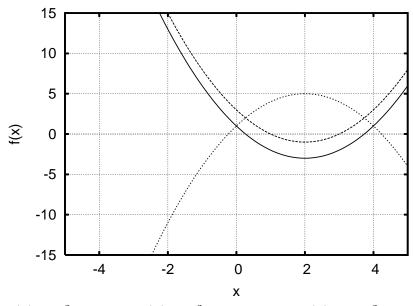


Figure 2: Plots of  $f(x) = x^2 - 4x + 1$ ,  $g(x) = x^2 - 4x + 3$ , and  $h(x) = -x^2 + 4x + 1$ . Which function is which?

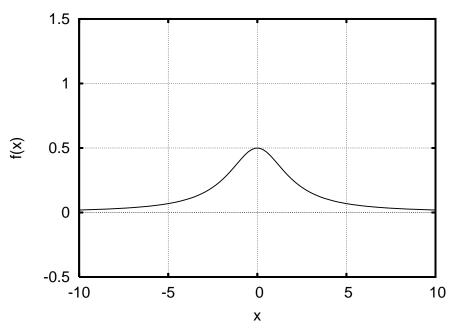


Figure 3: Plot of  $\frac{2}{x^2+4}$ . Explain why this graph has the shape that it does.

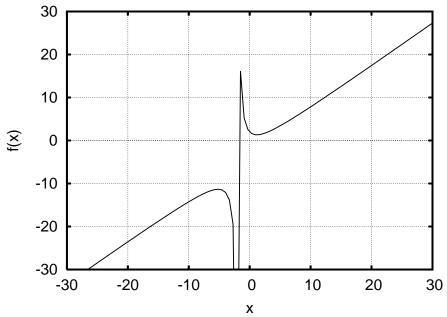


Figure 4: Plot of  $f(x) = \frac{x^2 - x + 4}{x + 2}$ . Explain why the plot looks like it does.