

Math 163A Sections 02 and 04 (Barsamian) Group Work #5

Friday October 28, 2005

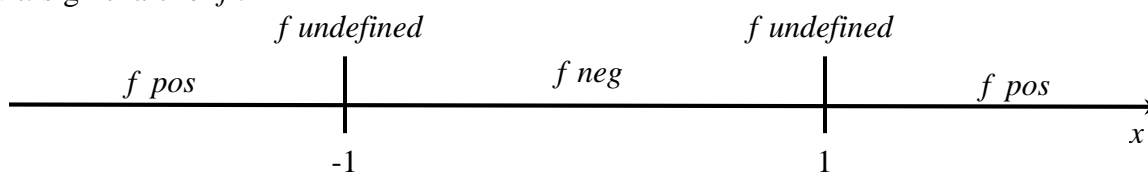
The goal of this problem is to use the 10-step method to sketch the graph of a function f . You are not given the function, but you are given some of the results of the first nine steps. Your job is to do step 10.

Step 1 result: $f(0) = -1$

Step 2 results: $f(x) = f(-x)$ and $f(x) \neq -f(-x)$.

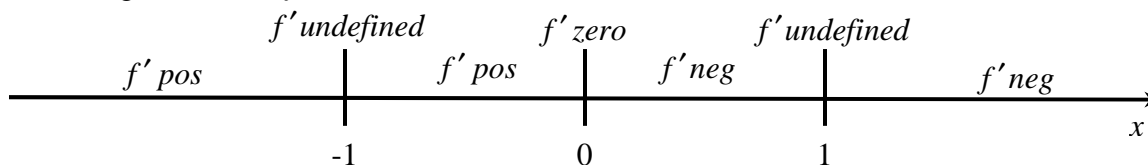
Step 3 result: Degree of numerator is 0; degree of denominator is 2.

Step 4 result: sign chart for f .

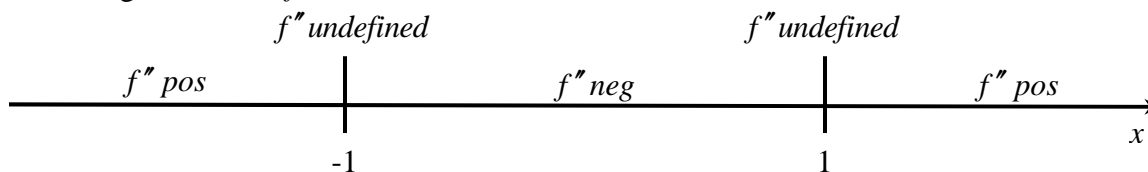


Step 5 results: There will be vertical asymptotes at $x = -1$ and at $x = 1$.

Step 6 & 7 result: sign chart for f' .



Step 8 & 9 result: sign chart for f'' .



Step 10: Graph of f :