

MATH 135: Quiz 9

November 4, 2014

Name: _____ Sec: _____

Fill in the following table and use it to sketch the graph of the function $f(x)$ below.

$$f(x) = \frac{(x+2)(x-2)^2}{x} \quad f'(x) = \frac{2(x-2)(x^2+x+2)}{x^2} \quad f''(x) = \frac{2(x+2)(x^2-2x+4)}{x^3}$$

For each row in the table, list the interval(s) or point(s) where f has the given property. If none exist, write “none”. The axes for the sketch are on the back of this page.

Roots ($f(x) = 0$)	
Increasing	
Decreasing	
Concave Up	
Concave Down	
Critical Points	
Inflection Points	
Horizontal Asymptotes	
Vertical Asymptotes	

