

Quiz 2 - MATH 151

DATE: Week 3, January 28 - February 1

INSTRUCTOR: George Voutsadakis

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points.

GOOD LUCK!!

1. Let $f(x) = 5(x - 3)^2(x + 9)^3$.
 - (a) Is f a polynomial function? What is its degree? (1 point)
 - (b) Identify a power function whose graph resembles the graph of $f(x)$ for large values of x . (2 points)
 - (c) Find the end behavior of $f(x)$. (2 points)
2. Find the domain of the rational function $f(x) = \frac{x-2}{x^2-9}$. (5 points)