

Math 16A: Short Calculus I
Fall 2017, Section 3
Homework Sheet 9
Due: Friday, December 8, 2017

Submit your solutions to the following problems in lecture on the due date above. Present your work in a clean and organized fashion, either on a printed copy of this document (preferred) or a separate sheet of paper. As stated in the syllabus, late submissions will **not** be accepted.

1. Graph the following function using the techniques we have seen in class. Identify on your graph all zeros, critical points, points of inflection. Additionally, identify for which values of x the function is positive, where it is negative, where it is increasing, where it is decreasing, where it is concave up, and where it is concave down.

$$f(x) = \frac{x^2 - 9}{x^2 - 4}$$