

Math 241 Fall 2017

Quiz 4

Name: _____

Show all work and circle/box your final answer. All answers must be simplified unless stated otherwise. Turn in when done.

1. (*6 points*) Find the open intervals of increase and decrease for $f(x) = 2x^3 + 3x^2 - 36x$. Indicate where any relative extrema occur (just the x -value).

2. (*4 points*) Find all numbers c that satisfy the conclusion of the mean value theorem for $f(x) = x^2 + 2x - 1$ on the interval $[-2, 3]$.