

Math 180-08;10;11 Fall  
Quiz 9 October 25th

Name: \_\_\_\_\_

Show all work to get full credit of this 10 point quiz. Please circle the section that you are in.  
All calculators are allowed, except for phones.

**1.** (*10 points*) Find the intervals where the function is increasing or decreasing, and local extrema of  $f(x)$  where

$$f(x) = 2x^2 - 8x + 9$$

Sketching the graph is not necessary on this problem, but doing it may give you some leeway points. The same goes for the 2nd derivative test and concavity.