

Math 135, Calculus 1, Fall 2020

Weekly Quiz 11-18

Show all work: clearly indicate your answer and the reasoning used to arrive at the answer. Unsupported answers may not receive full credit.

Problem 1. Consider the function $f(x) = 6x - x^2$.

(a) Use calculus to find the critical point(s) of $f(x)$.

(b) Use calculus to compute the absolute maximum and minimum values of $f(x)$ on $[0, 5]$.

(c) Use calculus to find the intervals where $f(x)$ is increasing or decreasing.