

Math 241 Fall 2018 Professor MG

Quiz 6

Name: _____

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

1. (5 points) A ice cube is melting at a rate of 4cm^3 per minute. How fast is the length of the side decreasing when the side is 2cm ? (The volume of a cube is given by $V = s^3$)

2. (5 points) Find all numbers c that satisfy the conclusion of the mean value theorem for $f(x) = 3x^2 + 2x + 2$ on the interval $[-1, 1]$.