King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 101 (172) Sec 10 - Quiz 3

Name: ID: Serial No.:

1. Use a linear approximation to estimate $\dfrac{1}{4.002}$

2. Find $\dfrac{d}{dx} tan^{-1}(\tanh x)$

3. Find the absolute maximum and absolute minimum values of $f(t) = t\sqrt{4 - t^2}$ on $[-1, 2]$.

4. Suppose that $3 \leq f'(x) \leq 5$ for all values of x. Show that $18 \leq f(8) - f(2) \leq 30$.