

Department of Mathematics and Statistics  
King Fahd University of Petroleum and Minerals  
Kingdom of Saudi Arabia

Math 101-092

Quiz # : 2

Name : = ----- ID# -----

Sec #: -----

Q 1 Let  $f(x) = \sinh(2x) + \cosh(3x)$

a. Evaluate  $f^{(1)}(x)$

b.  $f^{(1)}(3 \ln 2)$

Q # 2 Use linear approximation to evaluate  $f(x) = \sqrt{23} + \sqrt{26}$

Q# 3 Find  $f^{(1)}(x)$  when  $f(x) = \sinh^{-1}(2x) + \tanh^{-1}(3x)$