

King Fahd University of Petroleum & Minerals
Department of Mathematics and Statistics
(Semester 161) Math 101 Quiz # 3

Name: _____ I.D. # _____ Sr. # _____

1. Find the derivative of $y = \sqrt{x + \sqrt{x + \sqrt{x}}}$.
2. If $F(x) = f(3f(4f(x)))$, $f(0) = 0$, $f'(0) = 2$, find $F'(0)$
3. Given $\tan(x - y) = \frac{y}{1 + x^2}$, find dy/dx .
4. Given $y = \sqrt{\tan^{-1} x}$, find dy/dx .