

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 101 - Quiz 4

Name:

Student ID #:

Question 1. If $xy + \sin y = e$, then find $y''(0)$.

Question 2. Differentiate $y = \tan^2(\sec \theta)$.

Question 3. Differentiate $f(x) = \frac{(2x + 1)^2 \sqrt{1 - x^2}}{(x + 1)e^{x^2}}$.

Question 4. if $x^{\cos y} = y^{\sin x}$, then find $\frac{dy}{dx}$.