King Fahd University for Petroleum and Minerals Department of Mathematics & Statistics

Term 132

Math 101 (14)

Quiz#3 (3.2 & 3.3)

Family Name:

S.r#

Q1. Find
$$f'(1)$$
 if $f = \begin{cases} x \cdot e^x & , x < 1 \\ \frac{e}{x} & , x \ge 1 \end{cases}$.

Q3. Find the equation of the normal line to $y = x^2 + 1$ that is parallel to x + y = 4

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Term 132 Math 101 (08) Quiz#3 (3.2 & 3.3) Family Name: S.r#

Q1. $\lim_{x \to \frac{\pi}{2}} \frac{\sin x - 1}{2x - \pi}$ represents the derivative of some function, f, at some point, a. Find f and a

Q3. Find the equation of the tangent line to $y = 2\frac{x}{e^x} + 1$ at x = 0