KFUPM--Term 171

Math 201 Quiz 3(a) Time: 20 minutes Date: 21- 11- 2017

Name	ID	Sr #	Sec #	Marks:- $/_6$

Q 1. Find all first partial derivatives of $f(x, y, z) = xy \ \sin^{-1}(yz)$.

Q2. If $z = x^2y + 3xy^4, x = 2\sin t \cos t\,, y = \cos t$, use Chain Rule to find $\frac{dz}{dt}$ at $t = \pi$.

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Math 201 Quiz 3(b) Time: 20 minutes Date: 21- 11- 2017

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Q 1. Verify that the conclusion of Clairaut's Theorem holds for $f(x,y) = e^{xy} \sin y$.

Q2. If $z = \tan\frac{u}{v}$, $u = 2s + 3t, v = 3s - 2t$, use Chain Rule to find $\frac{\partial z}{\partial t}$.