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

Math-201   Semester-163   QUIZ IV

NAME: S.No.   ID:
Maximum Marks: 10   Section:07   Time Allowed: 30 minutes

(1) Find and sketch the domain of $f(x,y) = \ln(xy + x - y - 1)$.

(2) Find the limit, if it exists $\quad \lim\limits_{(x,y)\to(1,-1)} \dfrac{x^3 + y^3}{x + y}$.

(3) If $w = x \sin(x^2 y)$, find $\dfrac{\partial^2 w}{\partial x \partial y}$.

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