

King Fahd University of Petroleum and Minerals  
Department of Mathematical Sciences  
**Math 201-11&14 Quiz2(a) Fall 2006(061)**

ID#: \_\_\_\_\_ NAME: \_\_\_\_\_

Serial# \_\_\_\_\_ Sec: \_\_\_\_\_

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(1) Show that  $f(x, y) = \begin{cases} \frac{\tan(x^2+y^2)}{x^2+y^2} & (x, y) \neq (0, 0) \\ 1 & (x, y) = (0, 0) \end{cases}$  is continuous at  $(0, 0)$ .

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