

微積分A下(統計系)預習測驗 #9

姓名: _____ 系級: _____ 學號 _____

預習第15章第8節(pp. 1001-1007), 然後回答下列問題

1. State the Method of Lagrange Multipliers and memorize it. (page 1002)

2. Use Lagrange Multipliers to find the absolute extrema of $f(x, y) = x^2y$ subject to the constraint $x^2 + y^2 = 1$

3. Find the absolute extrema of $f(x, y) = x^2 + y^2 + x^2y + 4$ on the closed and bounded region
 $D = \{(x, y) \mid |x| \leq 1, |y| \leq 1\}$.