Section _____ **Name** _____

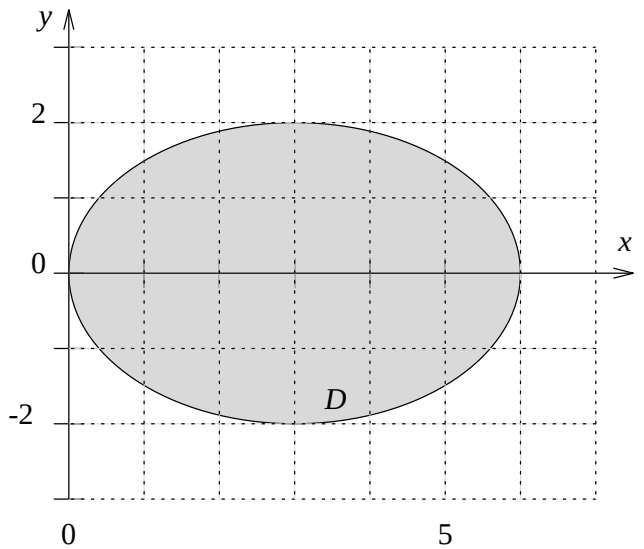
TA _____ **Student Number** _____

Math 126B **Calculus With Analytic Geometry III** **Spring 1995**

QUIZ #6

5/23/95

Straight lines must be drawn with a ruler; no credit will be given if drawn by hand. Don't worry about algebraically simplifying numbers (i.e. you may leave radicals in the denominator, fractions unreduced, etc.). **Show your work.**

The region D is the filled-in ellipse shown below, where the ellipse is described by the equation $4(x-3)^2 + 9y^2 = 36$. Using either ruler and pencil or computational methods, find the points in D where the function $g(x,y) = x + 4y$ takes its absolute maximum and minimum values. Be sure to show what method you use.

Maximum value:		is attained at $(x,y) =$	
Minimum value:		is attained at $(x,y) =$