

Name _____

SM223

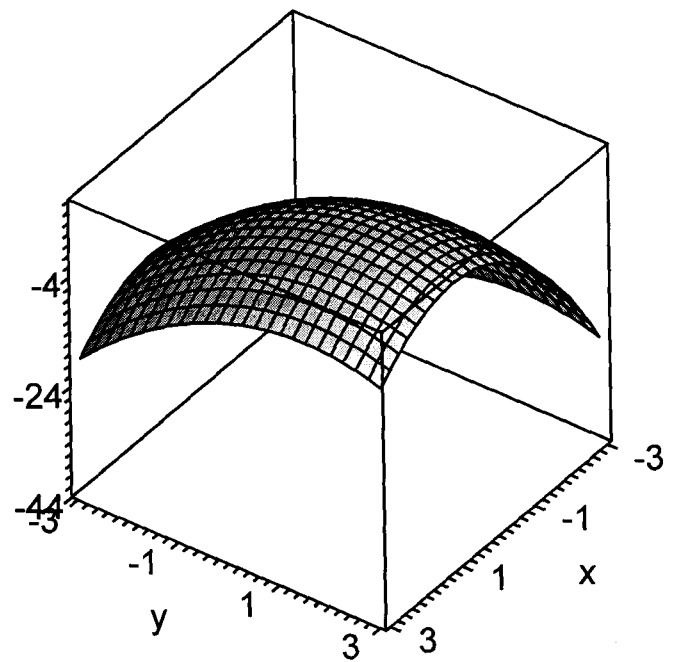
Quiz

31 October 2008

Consider the function $z = f(x,y) = 5 + 4x - 2x^2 + 3y - y^2$.

Locate all maximum or minimum points for this function by completing the following table

Equations	Values of the equations
f_x	
f_y	
f_{xx}	
f_{yy}	
f_{xy}	
f_{yx}	
(x, y)	
$D = \begin{vmatrix} f_{xx} & f_{xy} \\ f_{yx} & f_{yy} \end{vmatrix}$	
Conclusion	



Note: Solve $f_x = 0$ and $f_y = 0$ for x and y , then evaluate the point(s) that are obtained.