

$$\Delta A = \begin{vmatrix} \frac{\partial^2 F}{\partial x^2}(A) & \frac{\partial^2 f}{\partial x \partial y}(A) \\ \frac{\partial^2 F}{\partial y \partial x}(A) & \frac{\partial^2 F}{\partial y^2}(A) \end{vmatrix}$$