Suponga que $A = \cos(XY)\,i + (3XY - 2X^2)\,j - (3X + 2Y)\,k$

encuentre

$$\frac{\partial A}{\partial X};\ \frac{\partial A}{\partial Y};\ \frac{\partial^2 A}{\partial X^2};\ \frac{\partial^2 A}{\partial Y^2};\ \frac{\partial^2 A}{\partial X \partial Y};\ \frac{\partial^2 A}{\partial Y \partial X}$$

$$\frac{\partial A}{\partial X} = (-Y\,\text{sen}(XY))\,i + (3Y - 4X)\,j - (3)\,K$$

$$\frac{\partial A}{\partial Y} = (-X\,\text{sen}(XY))\,i + (3X)\,j - 2K$$

$$\frac{\partial^2 A}{\partial X^2} = (-Y^2\cos(XY))\,i - 4j + 0K$$

$$\frac{\partial^2 A}{\partial Y^2} = (-X^2\cos(XY))\,i + 0j + 0K$$

$$\frac{\partial^2 A}{\partial X \partial Y} = (-XY\cos(XY) - \text{sen}(XY))\,i + (3)\,j + 0K$$

$$\frac{\partial^2 A}{\partial Y \partial X} = (-XY\cos(XY) - \text{sen}(XY))\,i + (3)\,j - 0K$$