

QUESTION

If $f(x, y) = x^2y^2 + y \cos x$ determine $\frac{\partial f}{\partial x}$ and $\frac{\partial f}{\partial y}$.

ANSWER

$f(x, y) = x^2y^2 + y \cos x$, $\frac{\partial f}{\partial x} = 2xy^2 - y \sin x$, $\frac{\partial f}{\partial y} = 2x^2y + \cos x$