

Math 5B - Weekly quiz IV
04/22/2010

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Grade: / 3

Find the first order partial derivatives of the function $f(x, y) = \sin(x^3 y) + \sqrt{x^2 + y^2}$.

$$f_x = 3x^2 y \cos(x^3 y) + \frac{x}{\sqrt{x^2 + y^2}}$$

$$f_y = x^3 \cos(x^3 y) + \frac{y}{\sqrt{x^2 + y^2}}$$