



derivative

Examples

Random

Assuming "derivative" refers to a computation | Use as a general topic or referring to a mathematical definition or a word instead

■ function to differentiate:  $x^2 y + (xy)^{1/2} - 3$

Also include: differentiation variable

Derivative:

Step-by-step solution

$$\frac{\partial}{\partial y} (x^2 y + \sqrt{xy} - 3x^3 + 2y^5 + \cos(2y)) =$$
$$\left( -9 \times \frac{dx}{dy} x^2 + 2y \times \frac{dx}{dy} x + \frac{y \times \frac{dx}{dy} + x}{2\sqrt{xy}} + x^2 = 10y^4 - 2\sin(2y) \right)$$

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