

# Partial Differential Equation (PDE) @math

[@wikipedia](#)

[Differential equation](#) that contains unknown [multivariable functions](#) and their [partial derivatives](#)

A typical example is diffusion equation for a function  $p(t, x, y, z)$  or 4 variables:

$$(1) \quad \frac{\partial p}{\partial t} = \frac{\partial^2 p}{\partial x^2} + \frac{\partial^2 p}{\partial y^2} + \frac{\partial^2 p}{\partial z^2}$$

## See also

---

[Formal science](#) / [Mathematics](#)