


$$F\left(t, y, \frac{dy}{dt}, \frac{d^2y}{dt^2}, \dots\right) = 0$$

$y(t) \leftarrow$ función incógnita
 Variable independiente


ECUACIÓN DIFERENCIAL ORDINARIA

$$\frac{\partial^2 Z}{\partial x^2} + a_1 \frac{\partial^2 Z}{\partial x \partial y} + a_2 \frac{\partial^2 Z}{\partial y^2} = 0$$

$Z(x, y) \leftarrow$ incógnita
 Variables independientes

ECUACIÓN DIFERENCIAL EN DERIVADAS PARCIALES

$$\frac{d^2 y}{dt^2} = -9.8094 \quad \left\{ \begin{array}{l} y(0) = 2.10 \text{ m} \\ y'(0) = 0. \end{array} \right.$$


$$y(t) = -\frac{9.8094}{2} t^2 + 2.10$$

Solucion particular