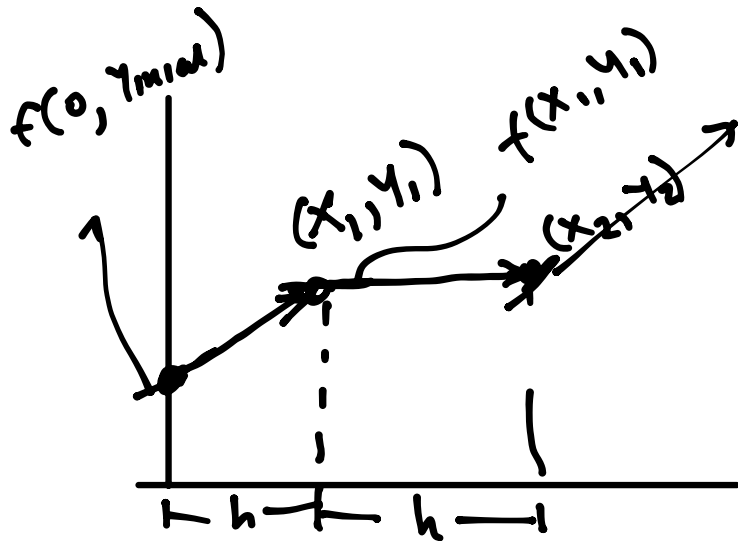
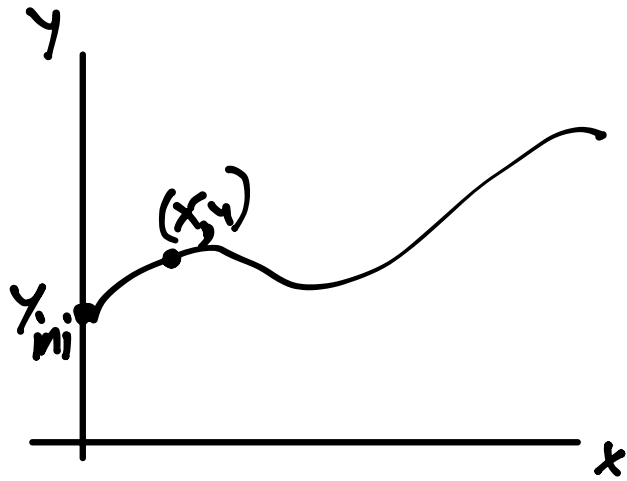


$$\frac{dy}{dx} = \underline{f(x, y)}$$

$$x = \underline{0} \quad y(0) = \underline{y_{inicial}}$$

$$(0, y_{inicial})$$



Método Euler
Explícito

$$a = 3 \frac{m}{s^2}$$

$$v(0) = 0$$

$$t = 0 \quad v(0) = 0$$

$$\begin{cases} \frac{dv}{dt} = 3 \\ t = 0 \quad v(0) = 0 \end{cases}$$

$$\frac{dv}{dt} \approx \frac{\Delta v}{\Delta t} = \frac{\Delta v}{h} = \frac{v(t+h) - v(t)}{h}$$

$$\frac{v(t+h) - v(t)}{h} = 3$$

$$v(t+h) = v(t) + 3h$$

$$t=0 \quad v(0)=0$$

$$v(h) = \cancel{v(0)}^0 + 3h = 3h$$

$$t=h \quad v(2h) = \cancel{v(h)}^{3h} + 3h$$

$$t=2h$$

$$v(3h) = v(2h) + 3h$$

t	$v(t)$
0	0
h	$3h$
$2h$	$6h$
$3h$	$9h$
\vdots	\vdots
\vdots	\vdots
\vdots	\vdots

q_i

$$i = 0, 1, 2, \dots, 10$$

$$\text{range}(0, 11)$$

$$i = 1, 2, 3, \dots, 9$$

$$\text{range}(1, 10)$$

