

$$y'(t) = -t y^2(t) = f(t, y(t))$$

$y(0) = 1$

Euler Modifié :

$$\begin{cases} \tilde{y}_{j+1} = y_j + h y'_j & f(t_j, y_j) \\ y_{j+1} = y_j + \frac{h}{2} (y'_j + y'_{j+1}) & f(t_{j+1}, \tilde{y}_{j+1}) \end{cases}$$

	y_j	$h y'_j$	\tilde{y}_{j+1}	$h y'_{j+1} = f(t_{j+1}, \tilde{y}_{j+1})$	y_{j+1}
$t_0 = 0.0$	1	$\oplus 0$	= 1	-0.01	0.995
$t_1 = 0.1$	0.995	$\oplus -9.95 \cdot 10^{-3}$	= 0.9850	-0.0194	0.98034
$t_2 = 0.2$	0.9803	$\oplus -0.0196$	= 0.961	-0.0277	0.9568

