

Trasformate di Laplace

$f(t)$	$L[f(t)] = F(s)$
$u(t)$	$\frac{1}{s}$
$e^{\omega t}u(t)$	$\frac{1}{s - \omega} \quad \omega \in \mathbb{C}$
$\text{sen}(\omega t)u(t)$	$\frac{\omega}{s^2 + \omega^2} \quad \omega \in \mathbb{R}$
$\text{cos}(\omega t)u(t)$	$\frac{s}{s^2 + \omega^2} \quad \omega \in \mathbb{R}$
$\text{senh}(\omega t)u(t)$	$\frac{s}{s^2 - \omega^2} \quad \omega \in \mathbb{R}$
$\text{cosh}(\omega t)u(t)$	$\frac{\omega}{s^2 - \omega^2} \quad \omega \in \mathbb{R}$
$t^n u(t)$	$\frac{n!}{s^{n+1}}$

$h(t)$	$L[h(t)]$
$e^{\omega t}f(t)$	$F(s - \omega)$
$f(t - A)$	$F(s)e^{-As}$
$\frac{df(t)}{dt}$	$sF(s)$
$tf(t)$	$-\frac{dF(s)}{ds}$
$t^n f(t)$	$(-1)^n \frac{d^n F(s)}{ds^n}$
$\int_0^t f(\tau) d\tau$	$\frac{1}{s} F(s)$
$\frac{f(t)}{t}$	$\int_0^\infty F(\sigma) d\sigma$
$\int_0^t f(\sigma)g(t - \sigma) d\sigma$	$F(s)G(s)$
$f(t)g(t)$	$\frac{1}{2\pi j} \lim_{L \rightarrow \infty} \int_{x-jL}^{x+jL} F(\sigma)G(s - \sigma) d\sigma$
$\begin{cases} f^*(t) & t \in [0, T] \\ f(t) = f(t + T) \end{cases}$	$\frac{1}{1 - e^{-sT}} L[f^*]$