

TABELA

N	Original $\varphi(t)$	Imagem $L[\varphi](p)$
1	$\chi(t) = 1$	$\frac{1}{p}$
2	$\text{sen } \alpha t$	$\frac{\alpha}{p^2 + \alpha^2}$
3	$\cos \alpha t$	$\frac{p}{p^2 + \alpha^2}$
4	$\cos \alpha (t - t_0)$	$\frac{pe^{-pt_0}}{p^2 + \alpha^2}$
5	$e^{-\alpha t}$	$\frac{1}{p + \alpha}$
6	$\text{sh } \alpha t$	$\frac{\alpha}{p^2 - \alpha^2}$
7	$\text{ch } \alpha t$	$\frac{p}{p^2 - \alpha^2}$
8	$e^{-\alpha t} \text{sen } \beta t$	$\frac{\beta}{(p + \alpha)^2 + \beta^2}$
9	$e^{-\alpha t} \cos \beta t$	$\frac{p + \alpha}{(p + \alpha)^2 + \beta^2}$
10	$t^n, n \in \mathbb{N}$	$\frac{n!}{p^{n+1}}$
11	$t^\alpha, \alpha \in \mathbb{R}$	$\frac{\Gamma(\alpha + 1)}{p^{\alpha+1}}$
12	$t^n f(t)$	$(-1)^n \frac{d^n}{dp^n} L[f](p)$
13	$t e^{-\alpha t}$	$\frac{1}{(p + \alpha)^2}$
14	$t \text{sen } \alpha t$	$\frac{2p\alpha}{(p^2 + \alpha^2)^2}$
15	$t \cos \alpha t$	$\frac{p^2 - \alpha^2}{(p^2 + \alpha^2)^2}$
16	$f^{(n)}(t)$	$p^n L[f](p) - p^{(n-1)}f(0) - \dots - p f^{(n-2)}(0) - f^{(n-1)}(0)$
17	$\int_0^t f(\tau) d\tau$	$\frac{1}{p} L[f](p)$
18	$\frac{f(t)}{t}$	$\int_p^\infty L[f](q) dq$
19	$f(t - t_0)$	$e^{-pt_0} L[f](p)$
20	$(f_1 * f_2)$	$L[f_1](p) \cdot L[f_2](p)$