Função	Primitiva	Função	Primitiva	Função	Primitiva
$u^r u'$ $(r \neq -1)$	$\dfrac{u^{r+1}}{r+1}$	$\dfrac{u'}{u}$	$\ln\lvert u\rvert$	$u' e^u$	e^u
$u' a^u$	$\dfrac{a^u}{\ln a}$	$u' \cos u$	$\operatorname{sen} u$	$u' \operatorname{sen} u$	$-\cos u$
$u' \sec^2 u$	$\operatorname{tg} u$	$u' \operatorname{cosec}^2 u$	$-\operatorname{cotg} u$	$u' \sec u$	$\ln\lvert \sec u + \operatorname{tg} u\rvert$
$u' \operatorname{cosec} u$	$-\ln\lvert \operatorname{cosec} u + \operatorname{cotg} u\rvert$	$\dfrac{u'}{\sqrt{1-u^2}}$	$-\arccos u$ ou $\operatorname{arcsen} u$	$\dfrac{u'}{1+u^2}$	$\operatorname{arctg} u$ ou $-\operatorname{arccotg} u$
$u' \sec u \operatorname{tg} u$	$\sec u$	$u' \operatorname{cosec} u \operatorname{cotg} u$	$-\operatorname{cosec} u$		

$\sec x = \dfrac{1}{\cos x}$ $\operatorname{cosec} x = \dfrac{1}{\operatorname{sen} x}$	$\operatorname{sen}(x \pm y) = \operatorname{sen} x \cos y \pm \cos x \operatorname{sen} y$ $\cos(x \pm y) = \cos x \cos y \mp \operatorname{sen} x \operatorname{sen} y$ $\operatorname{sen}(2x) = 2 \operatorname{sen} x \cos x$ $\cos(2x) = \cos^2 x - \operatorname{sen}^2 x$	$\cos^2 x = \dfrac{1+\cos(2x)}{2}$ $\operatorname{sen}^2 x = \dfrac{1-\cos(2x)}{2}$	$1 + \operatorname{tg}^2 x = \sec^2 x$ $1 + \operatorname{cotg}^2 x = \operatorname{cosec}^2 x$

Função	**Transformada**	**Função**	**Transformada**	**Função**	**Transformada**
t^n $(n \in \mathbb{N}_0)$	$\dfrac{n!}{s^{n+1}}$ $(s>0)$	e^{at} $(a \in \mathbb{R})$	$\dfrac{1}{s-a}$ $(s>a)$	$\operatorname{sen}(at)$ $(a \in \mathbb{R})$	$\dfrac{a}{s^2+a^2}$ $(s>0)$
$\cos(at)$ $(a \in \mathbb{R})$	$\dfrac{s}{s^2+a^2}$ $(s>0)$	$\operatorname{senh}(at)$ $(a \in \mathbb{R})$	$\dfrac{a}{s^2-a^2}$ $(s>\lvert a\rvert)$	$\cosh(at)$ $(a \in \mathbb{R})$	$\dfrac{s}{s^2-a^2}$ $s>\lvert a\rvert$

Propriedades da transformada de Laplace

$F(s) = \mathcal{L}\{f(t)\}(s)$, com $s > s_f$ e $G(s) = \mathcal{L}\{g(t)\}(s)$, com $s > s_g$

$\mathcal{L}\{f(t)+g(t)\}(s) = F(s)+G(s)\,,\ s > \max\{s_f, s_g\}$	$\mathcal{L}\{\alpha f(t)\}(s) = \alpha F(s)\,,\ s > s_f$ e $\alpha \in \mathbb{R}$
$\mathcal{L}\{e^{\lambda t} f(t)\}(s) = F(s-\lambda)\,,\ s > s_f + \lambda$ e $\lambda \in \mathbb{R}$	$\mathcal{L}\{t^n f(t)\}(s) = (-1)^n F^{(n)}(s)\,,\ s > s_f$ e $n \in \mathbb{N}$
$\mathcal{L}\{H_a(t)\cdot f(t-a)\}(s) = e^{-as}F(s)\,,\ s > s_f$ e $a > 0$	$\mathcal{L}\{f(at)\}(s) = \dfrac{1}{a}\,F\left(\dfrac{s}{a}\right)\,,\ s > a\,s_f$ e $a > 0$

$$\mathcal{L}\{f^{(n)}(t)\}(s) = s^n F(s) - s^{n-1} f(0) - s^{n-2} f'(0) - \ldots - s f^{(n-2)}(0) - f^{(n-1)}(0)$$

com $s > \max\{s_f, s_{f'}, s_{f''} \ldots, s_{f^{(n-1)}}\}$, $n \in \mathbb{N}$

$$\mathcal{L}\{(f * g)(t)\}(s) = F(s)\cdot G(s), \quad \text{onde} \quad (f*g)(t) = \int_0^t f(\tau) g(t-\tau)\, d\tau,\ t \geq 0$$