

$f(t)$	$F(s) = \mathcal{L}[f(t)](s)$
1	$\frac{1}{s}$
t	$\frac{1}{s^2}$
$t^n (n = 1, 2, 3, \dots)$	$\frac{n!}{s^{n+1}}$
$\frac{1}{\sqrt{t}}$	$\sqrt{\frac{\pi}{s}}$
e^{at}	$\frac{1}{s-a}$
te^{at}	$\frac{1}{(s-a)^2}$
$t^n e^{at}$	$\frac{n!}{(s-a)^{n+1}}$
$\frac{1}{a-b}(e^{at} - e^{bt})$	$\frac{1}{(s-a)(s-b)}$
$\frac{1}{a-b}(ae^{at} - be^{bt})$	$\frac{s}{(s-a)(s-b)}$
$\frac{(c-b)e^{at} + (a-c)e^{bt} + (b-a)e^{ct}}{(a-b)(b-c)(c-a)}$	$\frac{1}{(s-a)(s-b)(s-c)}$
$\text{sen}(at)$	$\frac{a}{s^2 + a^2}$
$\cos(at)$	$\frac{s}{s^2 + a^2}$
$1 - \cos(at)$	$\frac{a^2}{s(s^2 + a^2)}$
$at - \text{sen}(at)$	$\frac{a^3}{s^2(s^2 + a^2)}$
$\text{sen}(at) - at \cos(at)$	$\frac{2a^3}{(s^2 + a^2)^2}$
$\text{sen}(at) + at \cos(at)$	$\frac{2as^2}{(s^2 + a^2)^2}$
$t \text{sen}(at)$	$\frac{2as}{(s^2 + a^2)^2}$
$t \cos(at)$	$\frac{(s^2 - a^2)}{(s^2 + a^2)^2}$
$\frac{\cos(at) - \cos(bt)}{(b-a)(b+a)}$	$\frac{s}{(s^2 + a^2)(s^2 + b^2)}$
$e^{at} \text{sen}(bt)$	$\frac{b}{(s-a)^2 + b^2}$
$e^{at} \cos(bt)$	$\frac{s-a}{(s-a)^2 + b^2}$
$\text{senh}(at)$	$\frac{a}{s^2 - a^2}$
$\text{cosh}(at)$	$\frac{s}{s^2 - a^2}$
$\text{sen}(at)\text{cosh}(at) - \cos(at)\text{senh}(at)$	$\frac{4a^3}{s^4 + 4a^4}$
$\text{sen}(at)\text{senh}(at)$	$\frac{2a^2s}{s^4 + 4a^4}$

$f(t)$	$F(s) = \mathcal{L}[f(t)](s)$
$\sinh(at) - \sin(at)$	$\frac{2a^3}{s^4 - a^4}$
$\cosh(at) - \cos(at)$	$\frac{2a^2s}{s^4 - a^4}$
$\frac{1}{\sqrt{\pi t}} e^{at} (1 + 2at)$	$\frac{s}{(s-a)^{3/2}}$
$J_0(at)$	$\frac{1}{\sqrt{s^2 + a^2}}$
$J_n(at)$	$\frac{1}{a^n} \frac{(\sqrt{s^2 + a^2} - s)^n}{\sqrt{s^2 + a^2}}$
$J_0(2\sqrt{at})$	$\frac{1}{s} e^{-a/s}$
$\frac{1}{t} \sin(at)$	$\tan^{-1}\left(\frac{a}{s}\right)$
$\frac{2}{t} [1 - \cos(at)]$	$\ln\left(\frac{s^2 + a^2}{s^2}\right)$
$\frac{2}{t} [1 - \cosh(at)]$	$\ln\left(\frac{s^2 - a^2}{s^2}\right)$
$\frac{1}{\sqrt{\pi t}} - ae^{a^2t} \operatorname{erfc}\left(\frac{a}{\sqrt{t}}\right)$	$\frac{1}{\sqrt{s+a}}$
$\frac{1}{\sqrt{\pi t}} + ae^{a^2t} \operatorname{erf}\left(\frac{a}{\sqrt{t}}\right)$	$\frac{\sqrt{s}}{s-a^2}$
$e^{a^2t} \operatorname{erf}(a\sqrt{t})$	$\frac{a}{\sqrt{s}(s-a^2)}$
$e^{a^2t} \operatorname{erfc}(a\sqrt{t})$	$\frac{1}{\sqrt{s}(\sqrt{s+a})}$
$\operatorname{erfc}\left(\frac{a}{2\sqrt{t}}\right)$	$\frac{1}{s} e^{-a\sqrt{s}}$
$\frac{1}{\sqrt{\pi t}} e^{-a^2/4t}$	$\frac{1}{\sqrt{s}} e^{-a\sqrt{s}}$
$\frac{1}{\sqrt{\pi(t+a)}}$	$\frac{1}{\sqrt{s}} e^{as} \operatorname{erfc}(\sqrt{as})$
$\frac{1}{\pi t} \sin(2a\sqrt{t})$	$\operatorname{erf}\left(\frac{a}{\sqrt{s}}\right)$
$f\left(\frac{t}{a}\right)$	$aF(as)$
$e^{bt/a} f\left(\frac{t}{a}\right)$	$aF(as-b)$
$\delta_\epsilon(t)$	$\frac{e^{-\epsilon s} (1 - e^{-\epsilon s})}{\epsilon s}$
$\delta(t-a)$	e^{-as}
$L_n(t)$	$\frac{1}{s} \left(\frac{s-1}{s}\right)^n$
(Polinomio de Laguerre)	

$f(t)$

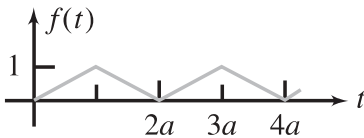
$$\frac{n!}{(2n)!\sqrt{\pi t}} H_{2n}(t)$$

(Polinomio de Hermite)

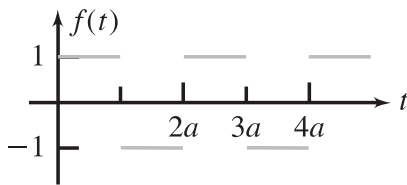
$$\frac{-n!}{\sqrt{\pi}(2n+1)!} H_{2n+1}(t)$$

(Polinomio de Hermite)

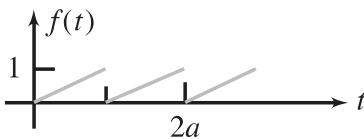
onda triangular



onda cuadrada



onda serrucho



$$F(s) = \mathcal{L}[f(t)](s)$$

$$\frac{(1-s)^n}{s^{n+1/2}}$$

$$\frac{(1-s)^n}{s^{n+3/2}}$$

$$\frac{1}{as^2} \left[\frac{1-e^{-as}}{1+e^{-as}} \right] \left(= \frac{1}{as^2} \tanh\left(\frac{as}{2}\right) \right)$$

$$\frac{1}{s} \tanh\left(\frac{as}{2}\right)$$

$$\frac{1}{as^2} - \frac{e^{-as}}{s(1-e^{-as})}$$

$f(t)$

$$af(t) + bg(t)$$

$$f'(t)$$

$$f^{(n)}(t)$$

$$\int_0^t f(\tau) d\tau$$

$$tf(t)$$

$$t^n f(t)$$

$$\frac{1}{t} f(t)$$

$$e^{at} f(t)$$

$$f(t-a)H(t-a)$$

$$f(t+\tau) = f(t)$$

(periódica)

$F(s)$

$$aF(s) + bG(s)$$

$$sF(s) - f(0+)$$

$$s^n F(s) - s^{n-1} f(0) - \dots - f^{(n-1)}(0)$$

$$\frac{1}{s} F(s)$$

$$-F'(s)$$

$$(-1)^n F^{(n)}(s)$$

$$\int_s^\infty F(\sigma) d\sigma$$

$$F(s-a)$$

$$e^{-as} F(s)$$

$$\frac{1}{1-e^{-\tau s}} \int_0^\tau e^{-st} f(t) dt$$