$f(t)$	$F(s) = \mathscr{L}\{f\}(s)$	*Domain*
1	$\frac{1}{s}$	$s > 0$
e^{at}	$\frac{1}{s-a}$	$s > a$
t^n	$\frac{n!}{s^{n+1}}$	$s > 0$
$\sin kt$	$\frac{b}{s^2+k^2}$	$s > 0$
$\cos kt$	$\frac{s}{s^2+k^2}$	$s > 0$

Properties of the Laplace Transform Notation: $F = \mathscr{L}\{f\}$
$\mathscr{L}\{f+g\} = \mathscr{L}\{f\} + \mathscr{L}\{g\}$
$\mathscr{L}\{cf\} = c\mathscr{L}\{f\}$, for any constant c
$\mathscr{L}\{e^{at}\, f(t)\} = F(s-a)$
$\mathscr{L}\{f'\} = s\mathscr{L}\{f\} - f(0)$
$\mathscr{L}\{f''\} = s^2\mathscr{L}\{f\} - sf(0) - f'(0)$
$\mathscr{L}\{f^{(n)}\} = s^n\mathscr{L}\{f\} - s^{n-1}f(0) - \cdots - f^{(n-1)}(0)$
$\mathscr{L}\{t^n\, f(t)\} = (-1)^n \frac{d^n}{ds^n} F(s)$
$\mathscr{L}\{f(t-a)\, u(t-a)\} = e^{-as}\mathscr{L}\{f\} = e^{-as}F(s)$
$\mathscr{L}\{f(t)\, u(t-a)\} = e^{-as}\mathscr{L}\{f(t+a)\}$
$\mathscr{L}\{f * g\} = \mathscr{L}\{f\}\mathscr{L}\{g\}$
$\mathscr{L}\{\delta(t-t_0)\} = e^{-s\,t_0}$, where $t_0 > 0$
$F_T(s) = F(s)\,(1 - e^{-sT})$