

$\mathbf{F(t)}$	$\mathcal{L}\{\mathbf{F(t)}\} = \mathbf{f(s)}$
1	$\frac{1}{s} \quad s > 0$
t	$\frac{1}{s^2} \quad s > 0$
t^n $n = 0, 1, 2, \dots$	$\frac{n!}{s^{n+1}} \quad s > 0$ Note. Factorial $n = n! = 1 \cdot 2 \dots n$ Also, by definition $0! = 1$
e^{at}	$\frac{1}{s-a} \quad s > a$
$\sin at$	$\frac{a}{s^2 + a^2} \quad s > 0$
$\cos at$	$\frac{s}{s^2 + a^2} \quad s > 0$
$\sinh at$	$\frac{a}{s^2 - a^2} \quad s > a $
$\cosh at$	$\frac{s}{s^2 - a^2} \quad s > a $