Table of Laplace Transforms

$f(x)$	$F(s) = \mathcal{L}[f(x)]$
c	$\dfrac{c}{s}, \quad s > 0$
e^{rx}	$\dfrac{1}{s-r}, \quad s > r$
$\cos \beta x$	$\dfrac{s}{s^2 + \beta^2}, \quad s > 0$
$\sin \beta x$	$\dfrac{\beta}{s^2 + \beta^2}, \quad s > 0$
$e^{rx} \cos \beta x$	$\dfrac{s-r}{(s-r)^2 + \beta^2}, \quad s > r$
$e^{rx} \sin \beta x$	$\dfrac{\beta}{(s-r)^2 + \beta^2}, \quad s > r$
$x,$	$\dfrac{1}{s^2}, \quad s > 0$
$x^2,$	$\dfrac{2}{s^3}, \quad s > 0$
$x^n, \quad n = 1, 2, \ldots$	$\dfrac{n!}{s^{n+1}}, \quad s > 0$
$xe^{rx},$	$\dfrac{1}{(s-r)^2}, \quad s > r$
$x^n e^{rx}, \quad n = 1, 2, \ldots$	$\dfrac{n!}{(s-r)^{n+1}}, \quad s > r$
$x \cos \beta x$	$\dfrac{s^2 - \beta^2}{(s^2 + \beta^2)^2}, \quad s > 0$
$x \sin \beta x$	$\dfrac{2\beta s}{(s^2 + \beta^2)^2}, \quad s > 0$

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