Table of Laplace Transforms	
$f(t)$ for $t \geq 0$	$\mathcal{L}[f](s)$
1	$\dfrac{1}{s}$
e^{at}	$\dfrac{1}{s-a}$
t^n	$\dfrac{n!}{s^{n+1}}$ $(n = 0, 1, \ldots)$
$t^n e^{at}$	$\dfrac{n!}{(s-a)^{n+1}}$ $(n = 0, 1, \ldots)$
$\sin at$	$\dfrac{a}{s^2+a^2}$
$\cos at$	$\dfrac{s}{s^2+a^2}$
$\sinh at$	$\dfrac{a}{s^2-a^2}$
$\cosh at$	$\dfrac{s}{s^2-a^2}$
$\sin at \sin bt$	$\dfrac{2abs}{[s^2+(a+b)^2][s^2-(a-b)^2]}$
1 for $0 \leq t < c$ 0 for $t \geq c$	$\dfrac{1-e^{-cs}}{s}$
1 for $0 \leq t < c$ 0 for $c \leq t < 2c$ period $2c$ (square wave)	$\dfrac{1}{s(1+e^{-cs})}$