Short Table of Laplace Transforms

	$f(t) = \mathcal{L}^{-1}\{F(s)\}$	$F(s) = \mathcal{L}\{f(t)\}$
1.	1	$\dfrac{1}{s}$
2.	e^{at}	$\dfrac{1}{s-a}$
3.	$t^n, \ n = 1, 2, \ldots$	$\dfrac{n!}{s^{n+1}}$
4.	$\sin(at)$	$\dfrac{a}{s^2 + a^2}$
5.	$\cos(at)$	$\dfrac{s}{s^2 + a^2}$
6.	$\cosh(at)$	$\dfrac{s}{s^2 - a^2}$
7.	$\sinh(at)$	$\dfrac{a}{s^2 - a^2}$
8.	$e^{at}\sin(bt)$	$\dfrac{b}{(s-a)^2 + b^2}$
9.	$e^{at}\cos(bt)$	$\dfrac{s-a}{(s-a)^2 + b^2}$
10.	$f^{(n)}(t)$	$s^n F(s) - s^{n-1} f(0) - \cdots - f^{(n-1)}(0)$
11.	$u_c(t)$	$\dfrac{e^{-cs}}{s}$
12.	$u_c(t) f(t - c)$	$e^{-cs} F(s)$
13.	$e^{ct} f(t)$	$F(s - c)$
14.	$(f * g)(t)$	$F(s) G(s)$
15.	$\delta(t - c)$	e^{-cs}