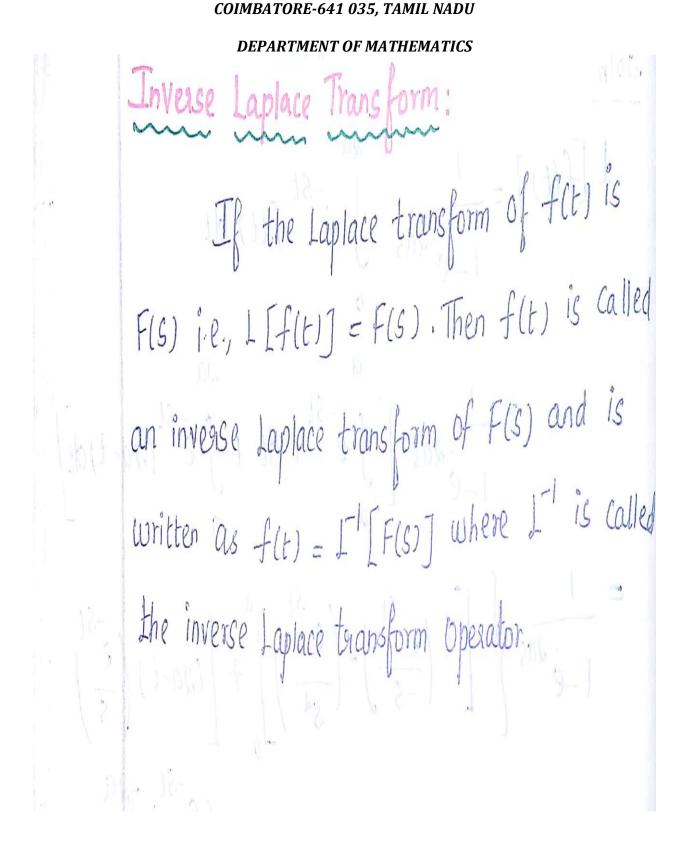


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Table of Inverse Laplace	Transformso:
(2) A shirt was soon soon	[F(s)] = f(t)
	$1^{-1}\left(\frac{1}{5}\right)=1$
(2) 1(t) = 11 1 1 1 - [(8)	
$ (\xi^n) = \frac{n!}{(\zeta^{n+1})!} $	$\frac{1}{2}\left(\frac{n!}{s^{n+1}}\right) = t^n$
(4) 1 (eat) = 111 1 313 =	$\left(\frac{1}{s-a}\right) = e^{ac}$
$(5) \perp (e^{-at}) = \frac{1}{(s+a)}$	$\frac{1}{s+a} = e^{a}$
(6) $L(Sinat) = \frac{a}{S^2 + a^2}$	$L^{-1}\left(\frac{\alpha}{s^{2}+a^{2}}\right) = \sin at$
	$\int_{-1}^{-1} \left(\frac{1}{s^2 + a^2} \right) = \frac{\sin at}{a}$
(8) $L\left(\cos at\right) = \frac{s}{s^2 + a^2}$	$\frac{1}{\left(\frac{S}{S^2 + a^2}\right)} = \cos at$
9 \perp (sinhat) = $\frac{a}{s^2 - a^2}$	$\int_{-1}^{-1} \left(\frac{a}{s^2 - a^2} \right) = S \ln h at$
4	$\frac{1}{s^2 - a^2} = \cosh at$
then I'[stis]=12 I'[(3)]	= (0) = S(+)
4D	+ flo) b (e).





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Important Results in Laplace Transforms:	Santidadilla
The a and b are constants while F(S)	
and Gics) are the Laplace triansform of f(t)	
& g(t) Diespectively.	
1. Linearity property: [a F(s) + b G(s)] = a [[F(s)] + b [[G	16
2. First Shifting property:	
$(i) [F(s+a)] = e^{at} [F(s)]$	3
(ii) $L^{-1}[F(s-a)] = e^{at} L^{-1}[F(s)]$	
3. Second Shifting property:	
If $\Gamma'[F(S)] = f(t)$ then	
1-1[e-as F(s)] - g(t) where	
$g(t) = \int f(t-a), t > a$	
4. Change of Scale property:	
$L^{-1}[F(\kappa s)] = \frac{1}{\kappa}f(\frac{\varepsilon}{\kappa})$	
5. Multiplication by s:	0
If $L'[F(s)] = f(t)$ and $f(0) = 0$	
$ = \int_{-\infty}^{\infty} \left[L_{F(S)} \right] = +(E) \text{ and } f(0) = 0 $	
then $L'[SF(S)] = \frac{d}{dt} L'[F(S)]$	0
	1
Note: If $f(0) \neq 0$ then $I'[SF(S)] = \frac{d}{dt} I'[F(S)] = \frac{d}{d$	(5)
$+ f(0) \delta(t)$	Loj





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