	$F(s)$	$f(t),\ t=0$
1.	1	$\delta(t_0)$, unit impulse at $t=t_0$
2.	$1/s$	1, unit step
3.	$n!/s^{n+1}$	t^n
4.	$1/(s+a)$	e^{-at}
5.	$\dfrac{1}{(s+a)^n}$	$\dfrac{1}{(n-1)!}t^{n-1}e^{-at}$
6.	$\dfrac{a}{s(s+a)}$	$1-e^{-at}$
7.	$\dfrac{1}{(s+a)(s+b)}$	$\dfrac{1}{(b-a)}\left(e^{-at}-e^{-bt}\right)$
8.	$\dfrac{(s+\alpha)}{(s+a)(s+b)}$	$\dfrac{1}{(b-a)}\left[(\alpha-a)e^{-at}-(\alpha-b)e^{-bt}\right]$
9.	$\dfrac{ab}{s(s+a)(s+b)}$	$1-\dfrac{b}{(b-a)}e^{-at}+\dfrac{a}{(b-a)}e^{-bt}$
10.	$\dfrac{1}{(s+a)(s+b)(s+c)}$	$\dfrac{e^{-at}}{(b-a)(c-a)}+\dfrac{e^{-bt}}{(c-b)(a-b)}+\dfrac{e^{-ct}}{(a-c)(b-c)}$
11.	$\dfrac{s+\alpha}{(s+a)(s+b)(s+c)}$	$\dfrac{(\alpha-a)e^{-at}}{(b-a)(c-a)}+\dfrac{(\alpha-b)e^{-bt}}{(c-b)(a-b)}+\dfrac{(\alpha-c)e^{-ct}}{(a-c)(b-c)}$
12.	$\dfrac{ab(s+\alpha)}{s(s+a)(s+b)}$	$\alpha-\left(\dfrac{b(\alpha-a)}{(b-a)}\right)e^{-at}+\left(\dfrac{a(\alpha-b)}{(b-a)}\right)e^{-bt}$
13.	$\omega/\left(s^2+\omega^2\right)$	$\sin(\omega t)$
14.	$s/\left(s^2+\omega^2\right)$	$\cos(\omega t)$
15.	$\dfrac{s+\alpha}{s^2+\omega^2}$	$\left(\dfrac{\sqrt{\alpha^2+\omega^2}}{\omega}\right)\sin(\omega t+\phi),\ \phi=\tan^{-1}(\omega/\alpha)$
16.	$\dfrac{\omega}{(s+a)^2+\omega^2}$	$e^{-at}\sin(\omega t)$
17.	$\dfrac{(s+a)}{(s+a)^2+\omega^2}$	$e^{-at}\cos(\omega t)$
18.	$\dfrac{s+\alpha}{(s+a)^2+\omega^2}$	$\dfrac{1}{\omega}\sqrt{(\alpha-a)^2+\omega^2}\ e^{-at}\sin(\omega t+\phi),\ \phi=\tan^{-1}\left(\dfrac{\omega}{\alpha-a}\right)$
19.	$\dfrac{\omega_n^2}{s^2+2\zeta\omega_n s+\omega_n^2}$	$\dfrac{\omega_n}{\sqrt{1-\zeta^2}}e^{-(\zeta\omega_n t)}\sin\left(\omega_n\sqrt{1-\zeta^2}\,t\right),\ \zeta<1$
20.	$\dfrac{1}{s\left((s+a)^2+\omega^2\right)}$	$\left(\dfrac{1}{a^2+\omega^2}\right)+\left(\dfrac{1}{\omega\sqrt{a^2+\omega^2}}\right)e^{-at}\sin(\omega t-\phi),\ \phi=\tan^{-1}(\omega/-a)$
21.	$\dfrac{\omega_n^2}{s\left(s^2+2\zeta\omega_n s+\omega_n^2\right)}$	$1-\left(\dfrac{1}{\sqrt{1-\zeta^2}}\right)e^{-(\zeta\omega_n t)}\sin\left(\left(\omega_n\sqrt{1-\zeta^2}\right)t+\phi\right),\ \phi=\cos^{-1}(\zeta),\ \zeta<1$
22.	$\dfrac{(s+\alpha)}{s\left((s+a)^2+\omega^2\right)}$	$\left(\dfrac{\alpha}{a^2+\omega^2}\right)+\dfrac{1}{\omega}\sqrt{\dfrac{(\alpha-a)^2+\omega^2}{a^2+\omega^2}}\ e^{-at}\sin(\omega t+\phi),\ \phi=\tan^{-1}\left(\dfrac{\omega}{\alpha-a}\right)-\tan^{-1}\left(\dfrac{\omega}{-a}\right)$
23.	$\dfrac{1}{(s+c)\left((s+a)^2+\omega^2\right)}$	$\left(\dfrac{e^{-ct}}{(c-a)^2+\omega^2}\right)-\left(\dfrac{e^{-at}\sin(\omega t+\phi)}{\omega\sqrt{(c-a)^2+\omega^2}}\right),\ \phi=\tan^{-1}\left(\dfrac{\omega}{a-c}\right)$