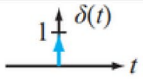
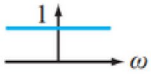
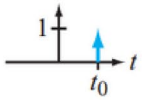
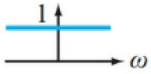
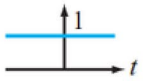
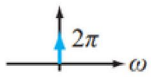
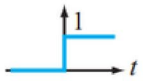
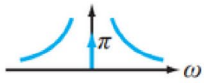
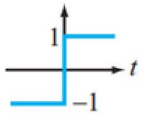
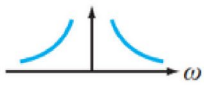
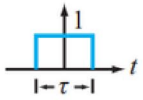
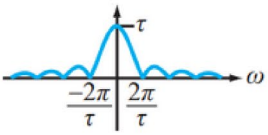
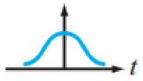
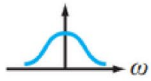
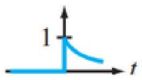
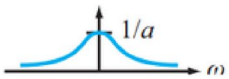
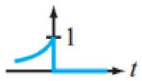
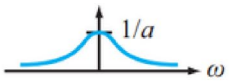
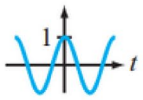
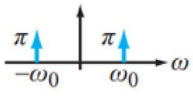
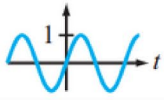
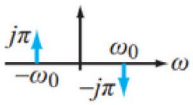
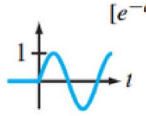
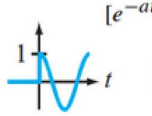
	$x(t)$		$\mathbf{X}(\omega) = \mathcal{F}[x(t)]$	$\lvert\mathbf{X}(\omega)\rvert$
1.		$\delta(t)$	1	
1a.		$\delta(t-t_0)$	$e^{-j\omega t_0}$	
2.		1	$2\pi\ \delta(\omega)$	
3.		$u(t)$	$\pi\ \delta(\omega) + 1/j\omega$	
4.		$\text{sgn}(t)$	$2/j\omega$	
5.		$\text{rect}(t/\tau)$	$\tau\ \text{sinc}(\omega\tau/2)$	
6.		$\frac{e^{-t^2/(2\sigma^2)}}{\sqrt{2\pi\sigma^2}}$	$e^{-\omega^2\sigma^2/2}$	
7a.		$e^{-at}\ u(t)$	$1/(a+j\omega)$	
7b.		$e^{at}\ u(-t)$	$1/(a-j\omega)$	
8.		$\cos\omega_0 t$	$\pi[\delta(\omega-\omega_0) + \delta(\omega+\omega_0)]$	
9.		$\sin\omega_0 t$	$j\pi[\delta(\omega+\omega_0) - \delta(\omega-\omega_0)]$	
10.		$e^{j\omega_0 t}$	$2\pi\ \delta(\omega-\omega_0)$	
11.		$te^{-at}\ u(t)$	$1/(a+j\omega)^2$	
12a.		$[e^{-at}\sin\omega_0 t]\ u(t)$	$\omega_0/[(a+j\omega)^2+\omega_0^2]$	
12b.		$[\sin\omega_0 t]\ u(t)$	$(\pi/2j)[\delta(\omega-\omega_0) - \delta(\omega+\omega_0)] + [\omega_0^2/(\omega_0^2-\omega^2)]$	
13a.		$[e^{-at}\cos\omega_0 t]\ u(t)$	$(a+j\omega)/[(a+j\omega)^2+\omega_0^2]$	
13b.		$[\cos\omega_0 t]\ u(t)$	$(\pi/2)[\delta(\omega-\omega_0) + \delta(\omega+\omega_0)] + [j\omega/(\omega_0^2-\omega^2)]$	

Note: formulas assume e^{-at} exponent coefficient $a \geq 0$.

14. $$\frac{Bsinc(Bt)}{\pi} \leftrightarrow rect(\frac{\omega}{2B})$$

15. $$tri(t/\tau) \leftrightarrow \tau sinc^2(\frac{\omega\tau}{2})$$

16. $$e^{-a|t|} \leftrightarrow \frac{2a}{(a^2+\omega^2)}$$

Assume a>0