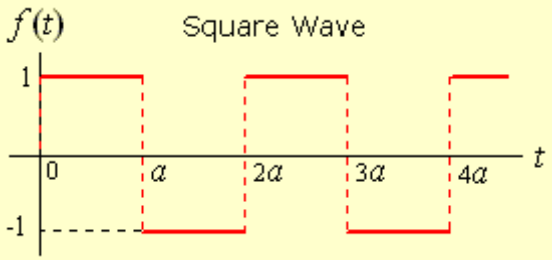
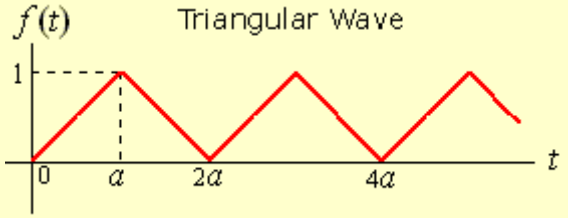
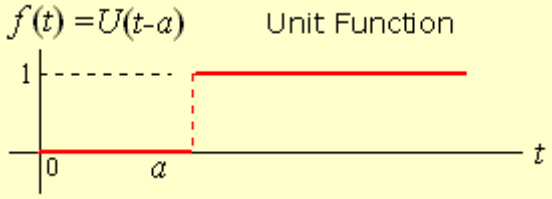
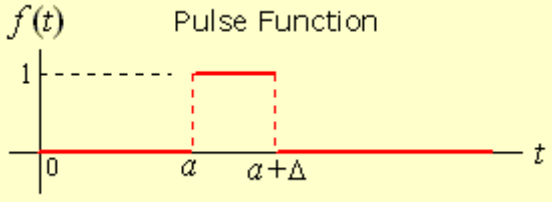
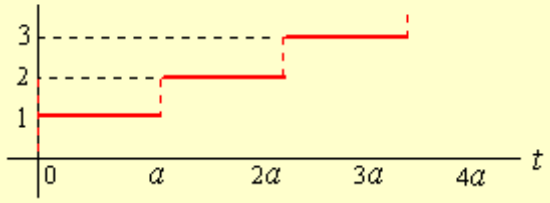
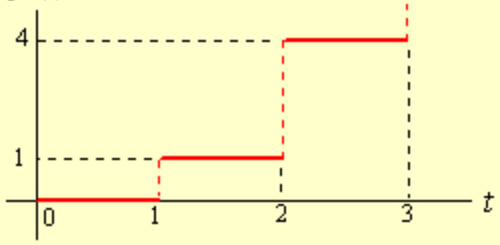
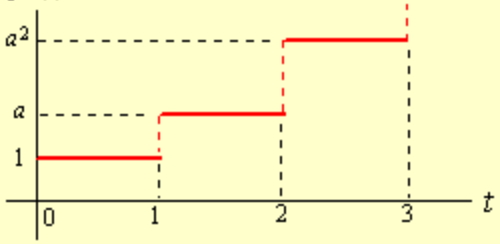
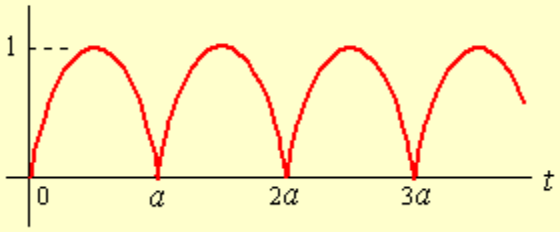
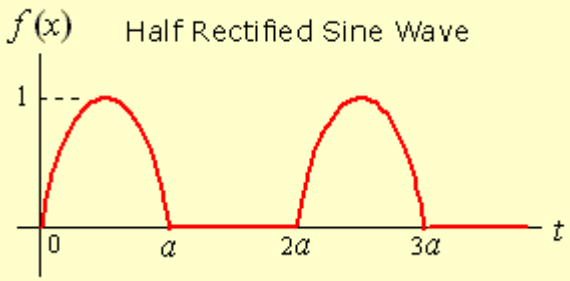
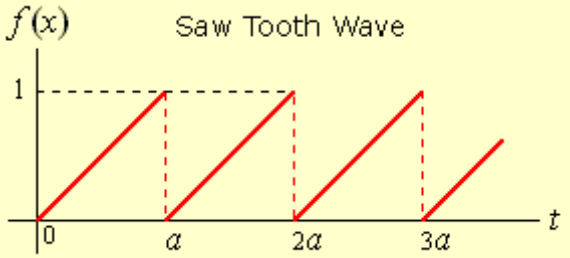
Laplace Transforms of Common Wave Forms

$f(t)$	$F(s)$
	$\frac{1}{s}\tanh\left(\frac{as}{2}\right)$
	$\frac{1}{as^2}\tanh\left(\frac{as}{2}\right)$
	$\frac{e^{-as}}{s}$
	$\frac{e^{-as}\left(1-e^{-s\Delta}\right)}{s}$

$f(t)$ Step Function 	$\frac{1}{s\left(1-e^{-as}\right)}$
$f(t)=n^2,\ n<t<n+1,\ \ n=0,1,2,\ldots$ 	$\frac{e^{-s}+e^{-2s}}{s\left(1-e^{-s}\right)^2}$
$f(t)=a^n,\ n<t<n+1,\ \ n=0,1,2,\ldots$ 	$\frac{1-e^{-s}}{s\left(1-ae^{-s}\right)}$
$f(x)=\lvert\sin(t\pi/a)\rvert$ 	$\frac{\pi a}{a^2s^2+\pi^2}\coth\left(\frac{as}{2}\right)$



$$\frac{\pi a}{\left(a^2 s^2 + \pi^2\right)\left(1 - e^{-as}\right)}$$



$$\frac{1}{as^2} - \frac{e^{-as}}{s\left(1 - e^{-as}\right)}$$