f(t)	F(w)	
f(t)	$\int_{-\infty}^{\infty} e^{-jwt} f(t)  dt$	
af(t) + bg(t)	aF(w) + bG(w)	
f(t-a)	$e^{-jaw}F(w)$	
$f(t)e^{jat}$	F(w-a)	
f(at)	$\frac{1}{ a }F(\frac{w}{a})$	
$\frac{d^n t f(t)}{dt^n}$	$(jw)^n F(w)$	
$t^n f(t)$	$(j)^n \frac{d^n w F(w)}{dw^n}$	
$(f \star g)(t)$	F(w)G(w)	
f(t)cos(at)	$\frac{1}{2}(F(w-a) + F(w+a))$	
f(t)sin(at)	$\frac{1}{2j}(F(w-a) - F(w+a))$	
rect(at)	$\frac{1}{\sqrt{2\pi a^2}} sinc(w - \frac{w}{2\pi a})$	
sinc(at)	$\frac{1}{\sqrt{2\pi a^2}} rect(w - \frac{w}{2\pi a})$	
$e^{-at}u(t)$	$\frac{1}{\sqrt{2\pi}(a+jw)}$	
1	$\sqrt{2\pi}\delta(w)$	
$\delta(t)$	$\frac{1}{\sqrt{2\pi}}$	
$e^{jat}$	$\sqrt{2\pi}\delta(w-a)$	
cos(at)	$\frac{\sqrt{2\pi}}{2}(\delta(w-a) + \delta(w+a))$	
sin(at)	$\frac{\sqrt{2\pi}}{2j}(\delta(w-a)+\delta(w+a))$	
$\frac{1}{t}$	$-j\sqrt{\frac{\pi}{2}}sign(w)$	

For the LATEX file see https://github.com/joey-kilgore/playground and look for the practice Transforms folder