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)	$\frac{1}{\sqrt{2\pi a^2}} sinc(\frac{w}{2\pi a})$
sinc(at)	$\frac{1}{\sqrt{2\pi a^2}} rect(\frac{w}{2\pi a})$
$e^{-at}u(t)$	$\frac{1}{\sqrt{2\pi}(a+jw)}$
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