$f(x)$	$\mathcal{F}(f)(\xi)$
δ_0	1
$\chi_{[a,b]}$	$\frac{\sin(\pi(b-a)\xi)}{\pi\xi} e^{-i\pi(a+b)\xi}$
$e^{-ax}\,\mathrm{H}(x),\ \mathrm{Re}(a) > 0$	$\frac{1}{a+2\pi i\xi}$
$\frac{x^k}{k!} e^{-ax}\,\mathrm{H}(x),\ \mathrm{Re}(a) > 0$	$\frac{1}{(a+2\pi i\xi)^{k+1}}$
$e^{-a\|x\|},\ \mathrm{Re}(a) > 0$	$\frac{2a}{a^2+4\pi^2\xi^2}$
$e^{-ax^2}, \quad a > 0$	$\sqrt{\frac{\pi}{a}} e^{-\frac{\pi^2}{a}\xi^2}$
$\cos(ax)$	$\left(\delta_{\left\{\frac{a}{2\pi}\right\}} + \delta_{\left\{-\frac{a}{2\pi}\right\}}\right)/2$
$\sin(ax)$	$\left(\delta_{\left\{\frac{a}{2\pi}\right\}} - \delta_{\left\{-\frac{a}{2\pi}\right\}}\right)/(2i)$
$\cos(ax^2)$	$\sqrt{\frac{\pi}{a}} \cos\left(\frac{\pi^2\xi^2}{a} - \frac{\pi}{4}\right)$
$\sin(ax^2)$	$-\sqrt{\frac{\pi}{a}} \sin\left(\frac{\pi^2\xi^2}{a} - \frac{\pi}{4}\right)$
$\mathrm{v.p.}\ \frac{1}{x}$	$-i\pi\,\mathrm{sgn}(\xi)$
e^{-ix^2}	$\sqrt{2\pi}(1/2 - i/2)e^{i\pi^2\xi^2}$
$e^{-ax^2},\ \mathrm{Re}(a) \geq 0$	$\sqrt{\frac{\pi}{\|a\|}} e^{-i\frac{\theta_0}{2}} e^{-\frac{\pi^2\xi^2}{a}},\ \theta_0 = \mathrm{arctg}(\mathrm{Im}(a)/\mathrm{Re}(a))$

Svojstva Fourierove transformacije:

- $\mathcal{F}(\alpha f + \beta g) = \alpha\mathcal{F}(f) + \beta\mathcal{F}(g)$
- $\mathcal{F}(\tau_a f)(\xi) = e^{-2\pi i a\xi}\mathcal{F}(f)(\xi)$
- $\mathcal{F}(f(ax))(\xi) = \frac{1}{|a|}\mathcal{F}\left(\frac{\xi}{a}\right)$
- $\mathcal{F}(\mathcal{F}(f))(\xi) = f(-\xi)$
- $\mathcal{F}\left(f^{(n)}\right)(\xi) = (2\pi i\xi)^n\mathcal{F}(f)(\xi)$
- $\mathcal{F}\left(x^n f(x)\right)(\xi) = \left(\frac{i}{2\pi}\right)^n \mathcal{F}(f)^{(n)}(\xi)$
- $\mathcal{F}(f * g)(\xi) = \mathcal{F}(f)\mathcal{F}(g)$