	$F(k)$	$f(x)$
1.	$F(k)G(k)$	$\frac{1}{\sqrt{2\pi}}\int_{-\infty}^{\infty} f(s)g(x-s)ds$
2.	$aF(k)+bG(k)$	$af(x)+bg(x)$
3.	$e^{-iak}F(k)$	$f(x-a)$
4.	$F(k-a)$	$f(x)e^{iax}$
5.	$F(k+a)+F(k-a)$	$2f(x)\cos(ax)$
6.	$F(k+a)-F(k-a)$	$-2if(x)\sin(ax)$
7.	$(ik)^nF(k)$	$\frac{d^nf}{dx^n}$
8.	$\frac{d^nF}{dk^n}$	$(-ix)^nf(x)$
9.	$\frac{1}{a^2+k^2}$	$\frac{1}{a}\sqrt{\frac{\pi}{2}}e^{-a\|x\|}$ for $a>0$
10.	$\frac{k}{a^2+k^2}$	$i\sqrt{\frac{\pi}{2}}e^{-a\|x\|}\left[I_{(0,\infty)}(x)-I_{(-\infty,0)}(x)\right]$ for $a>0$
11.	$\frac{\sin(ak)}{k}$	$\sqrt{\frac{\pi}{2}}I_{(-a,a)}(x)$ for $a>0$
12.	$\frac{1}{\sqrt{a^2-k^2}}I_{(-a,a)}(k)$	$\sqrt{\frac{\pi}{2}}\ J_0(ax)$ for $a>0$
13.	$\frac{1}{a+ik}$	$\sqrt{2\pi}e^{-ax}\,I_{(0,\infty)}(x)$ for $a>0$
14.	$\frac{1}{(a+ik)^{n+1}}$	$\frac{1}{n!}\sqrt{2\pi}x^ne^{-ax}\,I_{(0,\infty)}(x)$ for $a>0$
15.	$\frac{1}{a-ik}$	$\sqrt{2\pi}e^{ax}\,I_{(-\infty,0)}(x)$ for $a>0$
16.	$\frac{1}{(a-ik)^{n+1}}$	$\frac{1}{n!}\sqrt{2\pi}(-x)^ne^{ax}\,I_{(-\infty,0)}(x)$ for $a>0$
17.	$e^{-a\|k\|}$	$\sqrt{\frac{2}{\pi}}\frac{a}{a^2+x^2}$ for $a>0$
18.	$ke^{-a\|k\|}$	$\sqrt{\frac{2}{\pi}}\frac{2iax}{(a^2+x^2)^2}$ for $a>0$
19.	e^{-ak^2-ibk}	$\frac{1}{\sqrt{2a}}e^{-(x-b)^2/(4a)}$ for $a>0$
20.	$\frac{1}{k}(e^{-ibk}-e^{-iak})$	$-i\sqrt{2\pi}I_{(a,b)}(x)$ for $a<b$
21.	$\frac{\sin^2(ak/2)}{k^2}$	$\frac{1}{2}\sqrt{\frac{\pi}{2}}\,(a-\|x\|)\,I_{(-a,a)}(x)$ for $a>0$

Table 1.1: Inverse Fourier transforms. The indicator function $I_{(a,b)}(x)$ is defined in (4.41). The general formulas 2.-8. must be modified at a jump discontinuity, as given in (4.35). Also, the numbers a and b in this table are real-valued.