

Laplaceovo desatero	Fourierovo desatero
$\mathcal{L}[f(ct)] = \frac{1}{c} F\left(\frac{p}{c}\right)$	$\mathfrak{F}[f(c\vec{x})] = \frac{1}{ c ^r} F\left(\frac{\vec{\xi}}{c}\right)$
$\mathcal{L}[(-t)^n f(t)] = \frac{d^n F}{dp^n}$	$\mathfrak{F}[(i\vec{x})^\alpha f(\vec{x})] = \mathcal{D}^\alpha \mathfrak{F}[f(\vec{x})]$
$\mathcal{L}[\dot{f}(t)] = p \mathcal{L}[f(t)] - f(0_+)$	$\mathfrak{F}[\mathcal{D}^\alpha (f(\vec{x}))] = (-i\vec{\xi})^\alpha \mathfrak{F}[f(\vec{x})]$
$\mathcal{L}[\Theta(t) \int_0^t f(\tau) d\tau] = \frac{F(p)}{p}$	$\mathfrak{F}[1] = (2\pi)^r \delta(\vec{\xi})$
$\mathcal{L}\left[\frac{f(t)}{t}\right] = \int_p^\infty F(q) dq$	$\mathfrak{F}\mathfrak{F}[f(x)] = (2\pi)^r f(-x)$
$e^{ap} \mathcal{L}[f(t)] = \mathcal{L}[f(t+a)]$	$e^{i\vec{\mu}\vec{\xi}} \mathfrak{F}[f(\vec{x})] = \mathfrak{F}[f(\vec{x}-\vec{\mu})]$
$\mathcal{L}[e^{at} f(t)] = F(p-a)$	$\mathfrak{F}[e^{i\vec{\mu}\vec{x}} f(\vec{x})] = F(\vec{\xi} + \vec{\mu})$
$\int_0^\infty f(\tau) d\tau = \lim_{p \rightarrow 0^+} F(p)$	$\lim_{ \xi \rightarrow \infty} F(\xi) = 0$
$\mathcal{L}[f(t) \star g(t)] = F(p) \cdot G(p)$	$\mathfrak{F}[f(\vec{x}) \star g(\vec{x})] = \mathfrak{F}[f(\vec{x})] \cdot \mathfrak{F}[g(\vec{x})]$
$\int_0^\infty f(t) G(t) dt = \int_0^\infty F(t) g(t) dt$	$\int_{-\infty}^\infty f(x) G(x) dx = \int_{-\infty}^\infty F(x) g(x) dx$

Laplaceův vzor	Laplaceův obraz
$\delta(t - \tau)$	$e^{-p\tau}$
$\Theta(t)$	$\frac{1}{p}$
$\Theta(t) t^n \quad (n \in \mathbf{N}_0)$	$\frac{n!}{p^{n+1}}$
$\Theta(t) t^\alpha \quad (\alpha > -1)$	$\frac{\Gamma(\alpha+1)}{p^{\alpha+1}}$
$\Theta(t) e^{\mu t}$	$\frac{1}{p-\mu}$
$\Theta(t) \sin(\beta t)$	$\frac{\beta}{p^2 + \beta^2}$
$\Theta(t) \cos(\beta t)$	$\frac{p}{p^2 + \beta^2}$
$\Theta(t) (\sin(t) - t \cos(t))$	$\frac{2}{(1+p^2)^2}$
$\Theta(t) e^{\mu t} \cos(\omega t)$	$\frac{p-\mu}{(p-\mu)^2 + \omega^2}$
$\Theta(t) e^{\mu t} \sin(\omega t)$	$\frac{\omega}{(p-\mu)^2 + \omega^2}$
$\Theta(t) \sinh(\omega t)$	$\frac{\omega}{p^2 - \omega^2}$
$\Theta(t) \cosh(\omega t)$	$\frac{p}{p^2 - \omega^2}$

Fourieův vzor	Fourieův obraz	Obor
$e^{-a\ x\ ^2}$	$\left(\frac{\pi}{a}\right)^{r/2} e^{-\frac{\ \xi\ ^2}{4a}}$	\mathbf{E}^r
$\Theta(x) e^{ax}, \quad (a \neq 0)$	$\frac{-1}{a+i\xi}$	\mathbf{R}
$\delta(\vec{x} - \vec{\mu})$	$e^{i\vec{\xi}\vec{\mu}}$	\mathbf{E}^r
$\Theta(x)$	$\pi\delta(\xi) + i\mathcal{P}\frac{1}{\xi}$	\mathbf{R}
$\Theta(-x)$	$\pi\delta(\xi) - i\mathcal{P}\frac{1}{\xi}$	\mathbf{R}
$\text{sgn}(x)$	$2i\mathcal{P}\frac{1}{\xi}$	\mathbf{R}
1	$(2\pi)^r \delta(\vec{\xi})$	\mathbf{E}^r
$\mathcal{P}\frac{1}{x}$	$i\pi \text{sgn}(\xi)$	\mathbf{R}
$\mathcal{P}\frac{1}{x^2}$	$-\pi \xi $	\mathbf{R}
e^{ix^2}	$\sqrt{\pi} e^{-\frac{1}{4}(\xi^2 - \pi)}$	\mathbf{R}
$\Theta(\mathbf{R} - x)$	$2 \frac{\sin(\mathbf{R}\xi)}{\xi}$	\mathbf{R}
$\frac{\Theta(\mathbf{R} - \ \vec{x}\)}{\sqrt{\mathbf{R}^2 - \ \vec{x}\ ^2}}$	$2\pi \frac{\sin(\mathbf{R}\ \vec{\xi}\)}{\ \vec{\xi}\ }$	\mathbf{E}^2
$\delta_{S_{\mathbf{R}}}(\vec{x})$	$4\pi\mathbf{R} \frac{\sin(\mathbf{R}\ \vec{\xi}\)}{\ \vec{\xi}\ }$	\mathbf{E}^3
\vec{x}^α	$(i)^{ \alpha } (2\pi)^r \delta^{(\alpha)}(\vec{\xi})$	\mathbf{E}^r
e^{icx}	$2\pi\delta(\xi + c)$	\mathbf{R}
$\cos(cx)$	$\pi(\delta(\xi - c) + \delta(\xi + c))$	\mathbf{R}
$\sin(cx)$	$i\pi(\delta(\xi - c) - \delta(\xi + c))$	\mathbf{R}