Tabuľka Laplaceovej transformácie

Originál	Laplaceova transformácia
$f(t)$	$F(p) = \mathcal{L}[f(t)] = \int_0^\infty f(t)\, e^{-pt} dt$
$\eta(t)$	$\frac{1}{p}$
$\alpha f(t) + \beta g(t)$	$\mathcal{L}[\alpha f(t) + \beta g(t)] = \alpha \mathcal{L}[f(t)] + \beta \mathcal{L}[g(t)]$
$t^n f(t)$	$\mathcal{L}[t^n f(t)] = (-1)^n F^{(n)}(p)$
t^n	$\frac{n\,!}{p^{n+1}}$
$e^{at} f(t)$	$\mathcal{L}[e^{at} f(t)] = F(p-a)$
e^{at}	$\mathcal{L}[e^{at}] = \frac{1}{p-a}$
$t^n e^{at}$	$\mathcal{L}[t^n e^{at}] = \frac{n!}{(p-a)^{n+1}}$
$\cos t$	$\mathcal{L}[\cos t] = \frac{p}{p^2+1}$
$\sin t$	$\mathcal{L}[\sin t] = \frac{1}{p^2+1}$
$f(ct)\,,\ c \in \boldsymbol{R}^+$	$\mathcal{L}[f(ct)] = \frac{1}{c} F\left(\frac{p}{c}\right)$
$\eta(t-\tau) f(t-\tau)$	$\mathcal{L}[\eta(t-\tau) f(t-\tau)] = e^{-p\tau} F(p)$
$f(t)$ periodická - T	$\mathcal{L}[f(t)] = \frac{\int_0^T f(t) e^{-pt} dt}{1-e^{-pT}} = \frac{F_T(p)}{1-e^{-pT}}$
$f^{(k)}(t)$	$\mathcal{L}\left[f^{(k)}(t)\right] = p^k F(p) - \sum_{j=0}^{k-1} p^{k-1-j} f^{(j)}(0+)$
$\int_0^t f(s)\, ds$	$\mathcal{L}\left[\int_0^t f(s)\, ds\right] = \frac{F(p)}{p}$
$(f * g)(t) = \int_0^t f(s)\, g(t-s)\, ds$	$\mathcal{L}[(f * g)(t)] = \mathcal{L}[f(t)]\, \mathcal{L}[g(t)]$

Inverzná Laplaceova transformácia

$$f(t) = \sum_{k=1}^{n} res_{p=p_k} \left[F(p)\, e^{pt}\right],\ \forall t > 0$$