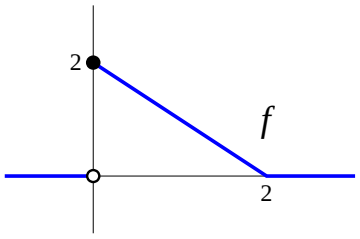
12. Gyak.
Laplace transzformált

Definíció szerint számítsa ki!

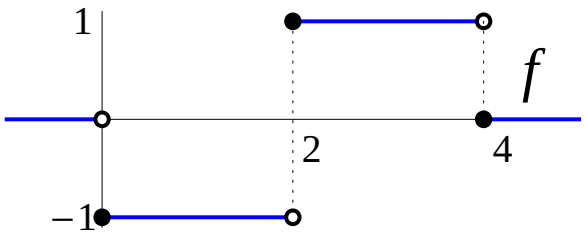
1. $\mathcal{L}(u(t))(s) = ?$ ahol

$$u(t) = \begin{cases} 1 & \text{, ha } x \geq 0 \\ 0 & \text{, különben} \end{cases}$$

2. $\mathcal{L}\left(\sin(\omega t)\right)(s) = ?$
3. $\mathcal{L}\left(e^{kt}\right)(s) = ?$
4. $\mathcal{L}\left(\cosh \omega t\right)(s) = ?$
5. $\mathcal{L}\left(t\right)(s) = ?$
6. $\mathcal{L}\left(t^2\right)(s) = ?$
7. $\mathcal{L}\left(f(t)\right)(s) = ?$ ahol



(a)



(b)