

Svojstva Laplaceove transformacije

Množenje konstantom:

$$f(\alpha t) \circ - \cdot \frac{1}{\alpha} F\left(\frac{s}{\alpha}\right)$$

$$F(\beta s) \cdot - \circ \frac{1}{\beta} f\left(\frac{t}{\beta}\right)$$

Pomak:

$$f(t - \alpha)u(t - \alpha) \circ - \cdot e^{-\alpha s} F(s)$$

Prigušenje:

$$e^{-\alpha t} f(t) \circ - \cdot F(s + \alpha)$$

Integriranje slike:

$$\frac{f(t)}{t} \circ - \cdot \int_s^\infty F(s) ds$$

Integriranje originala:

$$\int_0^t f(t) dt \circ - \cdot \frac{F(s)}{s}$$

Deriviranje slike:

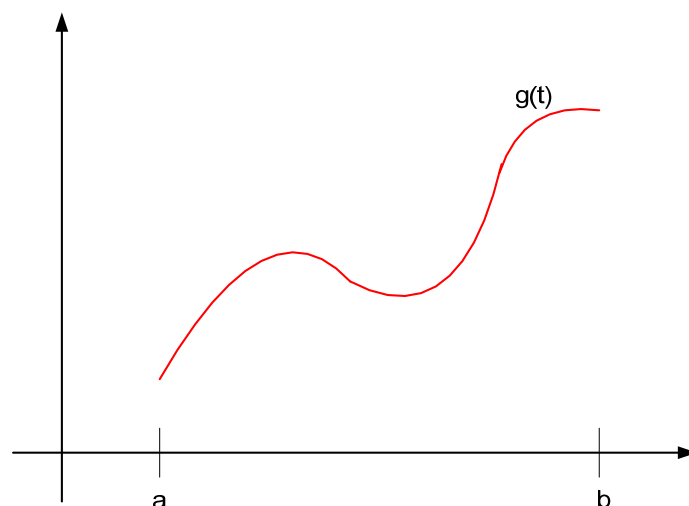
$$t^n f(t) \circ - \cdot (-1)^n \frac{\partial^n [F(s)]}{\partial s^n}$$

Deriviranje originala:

$$f'(t) \circ - \cdot sF(s) - f(0)$$

$$f''(t) \circ - \cdot s^2 F(s) - sf(0) - f'(0)$$

Prikaz pomoću gate funkcije:



$$f(t) = g(t - a)u(t - a) - g(t - b)u(t - b)$$