Операторни образи

$$A \doteqdot \frac{A}{p}$$

$$e^{\alpha t} \doteqdot \frac{1}{p-\alpha} \quad , \quad e^{-\alpha t} \doteqdot \frac{1}{p+\alpha}$$

$$e^{j\omega t} \doteqdot \frac{1}{p-j\omega} \quad , \quad e^{-j\omega t} \doteqdot \frac{1}{p+j\omega}$$

$$e^{j(\omega t+\psi)} \doteqdot \frac{e^{\pm j\psi}}{p-j\omega}$$

$$1-e^{-\alpha t} \doteqdot \frac{\alpha}{p(p+\alpha)}$$

$$cos\omega t \doteqdot \left(\frac{p}{p^2+\omega^2}\right)$$

$$sin\omega t \doteqdot \left(\frac{\omega}{p^2+\omega^2}\right)$$

$$t \doteqdot \frac{1}{p^2}$$

$$t^n = \frac{n!}{p^{n+1}}$$

$$te^{-\alpha t} \doteqdot \frac{1}{(p+\alpha)^2}$$

$$t^n e^{-\alpha t} \doteqdot \frac{n!}{(p+\alpha)^{n+1}}$$

$$sin(\omega t+\psi) \doteqdot \frac{p.sin\psi+\omega cos\psi}{p^2+\omega^2}$$

$$cos(\omega t+\psi) \doteqdot \frac{p.cos\psi-\omega sin\psi}{p^2+\omega^2}$$

$$e^{-\alpha t} sin\omega t \rightleftharpoons \frac{\omega}{(p+\alpha)^2 + \omega^2}$$

$$e^{-\alpha t} cos\omega t \rightleftharpoons \frac{(p+\alpha)}{(p+\alpha)^2 + \omega^2}$$

$$t.sin\omega t \rightleftharpoons \frac{2\omega p}{(p^2 + \omega^2)^2}$$

$$t.cos\omega t \rightleftharpoons \frac{p^2 - \omega^2}{(p^2 + \omega^2)^2}$$