

$$\mathcal{L}\{e^{ax}\} = \frac{1}{p - a}$$

$$\mathcal{L}\{x^n\} = \frac{n!}{p^{n+1}}, \text{ celé } n \geq 0$$

$$\mathcal{L}\{\sin ax\} = \frac{a}{p^2 + a^2}$$

$$\mathcal{L}\{\cos ax\} = \frac{p}{p^2 + a^2}$$

$$\mathcal{L}\{\sinh ax\} = \frac{a}{p^2 - a^2}$$

$$\mathcal{L}\{\cosh ax\} = \frac{p}{p^2 - a^2}$$

$$\mathcal{L}\{f(x)e^{ax}\} = L(p - a)$$

$$\mathcal{L}\left\{\int_0^x y(u) \cdot du\right\} = \frac{L(p)}{p}$$

$$\mathcal{L}\{f'(x)\} = pL(p) - f(0_+)$$

$$\mathcal{L}\{f^{(n)}(x)\} = p^n L(p) - p^{n-1}f(0_+) - p^{n-2}f'(0_+) - \dots - f^{n-1}(0_+)$$

$$\mathcal{L}\{-x \cdot f(x)\} = L'(p)$$

$$\mathcal{L}^{-1}\{L_1(p) \cdot L_2(p)\} = f_1(x) * f_2(x) = \int_0^x f_1(u) \cdot f_2(x - u) \cdot du$$

$$\mathcal{L}\left\{\int_0^x f_1(u) \cdot f_2(x - u) \cdot du\right\} = \mathcal{L}\{f_1(x) * f_2(x)\} = \mathcal{L}\{f_1(x)\} \cdot \mathcal{L}\{f_2(x)\}$$