

Antwoorden van de opdrachten:

$$\mathcal{L}(3) = \frac{3}{s}$$

$$\mathcal{L}(e^{2t}) = \frac{1}{s-2}$$

$$\mathcal{L}(3 + e^{5t}) = \frac{3}{s} + \frac{1}{s-5}$$

$$\mathcal{L}(5 \cos(4t) \cdot e^{3t}) = \frac{5(s-3)}{(s-3)^2+16}$$

$$\mathcal{L}(-2 \sin(3t) \cdot e^{5t}) = \frac{-6}{(s-5)^2+9}$$

$$\mathcal{L}(t^3) = \frac{6}{s^4}$$

$$\mathcal{L}(4t^2 - 5t + 3) = \frac{8}{s^3} - \frac{5}{s^2} + \frac{3}{s}$$

$$\mathcal{L}(5t^2 \cdot e^{3t}) = \frac{10}{(s-3)^3}$$

$$\mathcal{L}(t \cdot \cos(t)) = \frac{s^2-1}{(s^2+1)^2}$$

$$\mathcal{L}^{-1}\left(\frac{3}{s^2+4s+5}\right) = 3 \sin(t) \cdot e^{-2t}$$