

antwoorden LT-opgaven

LT 4

$$\frac{2}{s^2} + \frac{3}{s}$$

LT 5

$$\frac{\sqrt{\pi}}{2 s^{3/2}} + \frac{\sqrt{\pi}}{s^{1/2}}$$

LT 6

$$\frac{2}{(s-3)^3}$$

LT 7

$$\frac{8s}{(16+s^2)^2}$$

LT 8

$$t$$

LT 9

$$\frac{4}{\sqrt{3}} \sin\left(\frac{t}{\sqrt{3}}\right)$$

LT 10

$$\frac{e^{3t} t^4}{24} + e^{3t} \cos(t)$$

LT 11

$$y(t) = -\frac{11}{5} e^{-t} + \frac{1}{5} \cos(2t) + \frac{2}{5} \sin(2t)$$

LT 12

$$y(t) = \left(-\frac{\pi}{2} + \frac{t}{2}\right) \sin(t)$$

LT 13

$$y(t) = (2+t) e^{-2t} + (-1+3t) e^{-t}$$

LT 14

$$y(t) = -\frac{7}{50} e^{-\pi t} + \frac{7}{25} e^{3t} + \frac{e^t}{50} (-7 \cos(t) + \sin(t))$$