

XII harjutustund

1. Lahendage

$$y'' - 9y = (x^2 + 1)e^{3x}$$

2. Lahendage

$$y'' - 4y' + 4y = (x - 1)e^{-2x}$$

3. Lahendage

$$y'' + y = x \sin x$$

4. Lahendage

$$y^{(5)} - y^{(4)} = xe^x - 1$$

5. Lahendage

$$y'' - y' = x + \cos x$$

6. Lahendage

$$y'' + 4y' + 3y = x$$

7. Lahendage

$$\begin{cases} y'' + y = 4e^x \\ y(0) = 4 \\ y'(0) = -3 \end{cases}$$