



1.

$$A := \begin{pmatrix} 1 & -2 & -1 & 3 \\ 2 & 3 & 0 & 1 \\ 1 & 0 & -4 & -2 \\ 0 & -1 & 3 & 1 \end{pmatrix}$$

$$B = \begin{pmatrix} x_1 \\ x_2 \\ x_3 \\ x_4 \end{pmatrix} \quad +$$

$$C := \begin{pmatrix} 10 \\ 8 \\ 3 \\ -7 \end{pmatrix}$$

$$B := A^{-1} \cdot C$$

$$B = \begin{pmatrix} -1 \\ 2 \\ -3 \\ 4 \end{pmatrix}$$

2. $t := 0.0.1..10$

$$y(t) := \sin(0.25t) + 2t + e^{-0.85t} - 2 \cos\left(\frac{\pi t}{10}\right)$$

t =	y(t) =
0	-1
0.1	-0.856
0.2	-0.702
0.3	-0.541
0.4	-0.373
0.5	-0.197
0.6	-0.015
0.7	0.174
0.8	0.368
0.9	0.568
1	0.773
1.1	0.982
1.2	1.197
1.3	1.415
1.4	1.637
1.5	1.864

