

## Próba feladatok a 9. gyakorlathoz

1.  $\underline{x} = [-2, -1, 0, 1, 2]$ ,  $\underline{y} = [0, 4, 5, 7, 8]$ ,  $n = 1$  illetve  $n = 2$

*megoldás:*

$$n = 1 \quad y = 1.9 * x + 4.8$$

$$n = 2 \quad y = 8.07 * x^2 + 1.9 * x - 11.34$$

2.  $\underline{x} = [-2, -1, 1, 2]$ ,  $\underline{y} = [3, 1, 0, 2]$ ,  $n = 2$

*megoldás:*

$$y = 0.67 * x^2 - 0.3 * x - 0.17$$

3. Általánosított inverzhez

$$A = \begin{bmatrix} 1 & 1 \\ -2 & 0 \\ 1 & -1 \end{bmatrix}, \quad B = \begin{bmatrix} 5 & 1 & 2 \\ 1 & 0 & 4 \end{bmatrix}, \quad C = \begin{bmatrix} 1 & 1 & 1 \\ 2 & 4 & 2 \\ -1 & 5 & -2 \end{bmatrix}, \quad D = \begin{bmatrix} 1 & 0 & 2 & -1 \\ 2 & 1 & 1 & 0 \\ 1 & 1 & -1 & 1 \end{bmatrix}$$

*megoldás:*

$$A^+ = \begin{bmatrix} \frac{1}{6} & -\frac{1}{3} & \frac{1}{6} \\ \frac{1}{2} & 0 & -\frac{1}{2} \end{bmatrix}, \quad B^+ = \begin{bmatrix} 0.21 & -0.1 \\ 0.05 & -0.04 \\ -0.05 & 0.28 \end{bmatrix}, \quad C = \begin{bmatrix} 9 & -3.5 & 1 \\ -1 & 0.5 & 0 \\ -7 & 3 & -1 \end{bmatrix},$$

$$D^+ = \begin{bmatrix} 0.07 & 0.23 & 0.17 \\ -0.03 & 0.13 & 0.17 \\ 0.23 & 0.07 & -0.17 \\ -0.13 & 0.03 & 0.17 \end{bmatrix}$$