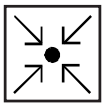

Úlohy k samostatnému řešení

1.

$$\mathbf{A} = \begin{pmatrix} 1 & -3 & 2 \\ -3 & 8 & -4 \\ -1 & 5 & -7 \end{pmatrix}, \quad \mathbf{b} = \begin{pmatrix} -10 \\ 28 \\ 14 \end{pmatrix}.$$

2.

$$\mathbf{A} = \begin{pmatrix} 1 & 0 & 2 \\ 3 & -2 & 9 \\ -7 & 2 & -19 \end{pmatrix}, \quad \mathbf{b} = \begin{pmatrix} 13 \\ 64 \\ -130 \end{pmatrix}.$$

3.

$$\mathbf{A} = \begin{pmatrix} -1 & 1 & -1 \\ 3 & -4 & 5 \\ -1 & 3 & -2 \end{pmatrix}, \quad \mathbf{b} = \begin{pmatrix} 11 \\ -48 \\ 20 \end{pmatrix}.$$

4.

$$\mathbf{A} = \begin{pmatrix} -2 & 3 & 4 \\ -4 & 8 & 9 \\ 6 & -7 & -9 \end{pmatrix}, \quad \mathbf{b} = \begin{pmatrix} 17 \\ 41 \\ -42 \end{pmatrix}.$$

5.

$$\mathbf{A} = \begin{pmatrix} 2 & -3 & 4 \\ -4 & 4 & -7 \\ 6 & -7 & 13 \end{pmatrix}, \quad \mathbf{b} = \begin{pmatrix} 21 \\ -34 \\ 59 \end{pmatrix}.$$

6.

$$\mathbf{A} = \begin{pmatrix} 4 & -3 & -2 & -1 \\ 8 & -7 & -2 & -4 \\ -12 & 11 & 4 & 10 \\ -8 & 6 & 0 & 0 \end{pmatrix}, \quad \mathbf{b} = \begin{pmatrix} 11 \\ 25 \\ -27 \\ -38 \end{pmatrix}.$$

7.

$$\mathbf{A} = \begin{pmatrix} 2 & 0 & -1 & 3 \\ 6 & -2 & 0 & 8 \\ -4 & 2 & -4 & -3 \\ -4 & -2 & 8 & -7 \end{pmatrix}, \quad \mathbf{b} = \begin{pmatrix} -3 \\ 18 \\ -47 \\ 57 \end{pmatrix}.$$

8.

$$\mathbf{A} = \begin{pmatrix} 4 & -3 & 2 & -1 \\ 16 & -14 & 11 & -5 \\ -8 & 0 & 6 & 3 \\ -4 & -5 & 7 & -18 \end{pmatrix}, \quad \mathbf{b} = \begin{pmatrix} 12 \\ 63 \\ 21 \\ 51 \end{pmatrix}.$$

9.

$$\mathbf{A} = \begin{pmatrix} -4 & 3 & 1 & -3 \\ 12 & -8 & -4 & 7 \\ -8 & 4 & 5 & -5 \\ -16 & 9 & 9 & -15 \end{pmatrix}, \quad \mathbf{b} = \begin{pmatrix} -1 \\ -4 \\ 15 \\ 23 \end{pmatrix}.$$

10.

$$\mathbf{A} = \begin{pmatrix} -2 & -5 & 1 & 0 \\ -4 & -12 & 9 & -2 \\ -6 & -11 & -8 & 7 \\ -8 & -20 & -2 & -9 \end{pmatrix}, \quad \mathbf{b} = \begin{pmatrix} 13 \\ 11 \\ 63 \\ 61 \end{pmatrix}.$$