Příklady z Algebry I: Soustavy lineárních rovnic

(1)
$$\begin{aligned} x + 7y &= 4 \\ -2x - 9y &= 2 \end{aligned}$$

(2)
$$\begin{aligned} 3z - 5w &= -1 \\ 2z + w &= 8 \end{aligned}$$

(3)
$$\begin{aligned} x - 2y + z &= 0 \\ 2y - 8z &= 8 \\ -4x + 5y + 9z &= -9 \end{aligned}$$

(4)
$$\begin{aligned} x + 2y - 3z + u &= 7 \\ -x + y - z + u &= 4 \end{aligned}$$

(5)
$$\begin{aligned} x + y - z - u &= 0 \\ x + z - u &= -1 \\ 2x + 2y + z - 3u &= 2 \end{aligned}$$

(6)
$$\begin{aligned} x + y + 2z &= 4 \\ x - y - z &= -1 \\ 2x - 4y - 5z &= 1 \end{aligned}$$

(7)
$$\begin{aligned} x + y + z + u &= 0 \\ 2x + 2y + z + u &= 0 \\ x + y - z + u &= 0 \end{aligned}$$

(8)
$$\begin{aligned} 2x - y + 3z &= 0 \\ 4x + 2y + 2z &= 0 \\ -2x + 5y - 4z &= 0 \end{aligned}$$

(9)
$$\begin{aligned} x + 3y - 13z &= -6 \\ 2x - y + 3z &= 3 \\ 3x + y - 5z &= 0 \\ 4x - y + z &= 3 \end{aligned}$$

(10)
$$\begin{aligned} x - 2y + z - u &= 1 \\ 2x - y + z + u &= 0 \\ 3x - 3y + 2z &= 1 \\ x + y + z + u &= 2 \end{aligned}$$

(11)
$$\begin{aligned} x + y + z &= 6 \\ x + y - z &= 0 \\ x - y + z &= 2 \\ 2x + 2y + z &= 9 \end{aligned}$$

(12)
$$\begin{aligned} x - y + 2z + 3u &= 10 \\ x - 2y + 3z + 4u + 2v &= -2 \\ x + 2y - z - v &= -3 \\ 2x + 3y - z + u - 2v &= -5 \end{aligned}$$

(13)
$$\begin{aligned} x - 2y + z - u &= -1 \\ x - 2y + z + 5u &= 5 \\ x - 2y + z + u &= 1 \end{aligned}$$

(14)
$$\begin{aligned} x + 2y + 5z - 4u &= 1 \\ x + 3y + 2z - 2u + v &= -1 \\ x - 2y + z - u - v &= 3 \\ x - 4y + z + u - v &= 3 \\ x - 2y + z - u + v &= -1 \end{aligned}$$