

SOUHRN – SOUSTAVY LINEÁRNÍCH ROVNIC

Veškeré příklady jsou ze zkuškových variant.

$$\begin{array}{rcl}
 & -x + 3y - 2z - 3t & = -2 \\
 (1) & x - y + 2z + t & = 0 \\
 & 3x + 2y - z - 9t & = -12 \\
 & -2x - 2y + z + 7t & = 9
 \end{array}
 \quad \vec{v} = (2t - 3; \quad t - 1; \quad 1 - t; \quad t)$$

$$\begin{array}{rcl}
 & x - y + 3z - t & = 1 \\
 (2) & & y - 2z + t & = -1 \\
 & 3x + y - z + 2t & = 5 \\
 & 3x + 2y - 2z + 3t & = 4
 \end{array}
 \quad \vec{v} = (0; \quad -7; \quad 0; \quad 6)$$

$$\begin{array}{rcl}
 & -x + 2y + 3z - 2t & = 6 \\
 (3) & -3x - y + z - 7t & = -5 \\
 & -2x + 2y & - 8t & = -2 \\
 & x - y + 2z + 6t & = 5
 \end{array}
 \quad \vec{v} = (2 - 3t; \quad t + 1; \quad 2 - t; \quad t)$$

$$\begin{array}{rcl}
 & x + y + z - 4t & = 1 \\
 (4) & 2x - y + 3z - 13t & = 1 \\
 & -2x + 2y + z + 6t & = 8 \\
 & 3x - 2z & - 5t & = -10
 \end{array}
 \quad \vec{v} = (3t - 2; \quad 1 - t; \quad 2 + 2t; \quad t)$$

$$\begin{array}{rcl}
 & x & + 2z - t & = -4 \\
 (5) & 2x + y - z - 3t & = -2 \\
 & -x + 2y + 3z - t & = 1 \\
 & 2x + 3y + 4z - 5t & = -5
 \end{array}
 \quad \vec{v} = (t - 2; \quad t + 1; \quad -1; \quad t)$$

$$\begin{array}{rcl}
 & x + y + z - t & = 0 \\
 (6) & x + 2y - z + t & = 4 \\
 & & y - 2z + t & = -4 \\
 & 2x + 4y - 2z + t & = 0
 \end{array}
 \quad \vec{v} = (20 - 3z; \quad 2z - 12; \quad z; \quad 8)$$

$$\begin{array}{rcl}
 & 3x + 5y & + t & = 0 \\
 (7) & 2x + 3y - z + 2t & = 0 \\
 & x + 2y + z - t & = 0 \\
 & 4x + 5y - 5z + 8t & = 0
 \end{array}
 \quad \vec{v} = (5z - 7t; \quad 4t - 3z; \quad z; \quad t)$$

$$\begin{array}{rcl}
 & x - y + 2z - t & = 5 \\
 (8) & 2x - 3y + z - 7t & = -1 \\
 & 3x - y - 2z - 7t & = -5 \\
 & 4x + 2y - z - t & = 5
 \end{array}
 \quad \vec{v} = (t + 1; \quad 2 - 2t; \quad 3 - t; \quad t)$$

Nepočítáno

$$\begin{array}{rcl}
 & x + 3y - 2z + 18t & = -7 \\
 (9) \quad - & x - 2y + z - 8t & = -6 \\
 & 3y - 4z + 18t & = -2 \\
 & 3x - y - z + 8t & = 10
 \end{array}$$

$$\vec{v} = \left(\frac{175}{19}; \frac{274}{57}; -\frac{135}{19}; -\frac{142}{57} \right)$$

$$\begin{array}{rcl}
 & x + y - z + t & = 4 \\
 (10) \quad & 3x + 2y - 4z + 4t & = 13 \\
 & 3y - 2z - 3t & = 7 \\
 - & 4x + 6y - z - 14t & = 4
 \end{array}$$

$$\vec{v} = (1 - 2t; t + 1; -2; t)$$

$$\begin{array}{rcl}
 & x - y - 2z - 3t & = 5 \\
 (11) \quad - & x + 2z + 3t & = 3 \\
 & 2x + y + 3t & = 6 \\
 & 2x + 2y + 3z + t & = 4
 \end{array}$$

$$\vec{v} = \left(\frac{1}{35}; 2; -\frac{16}{35}; \frac{46}{35} \right)$$

$$\begin{array}{rcl}
 & x + y - z + t & = 4 \\
 (12) \quad & 3x + 2y - 4z + 4t & = 13 \\
 & 3y - 2z - 3t & = 7 \\
 - & 4x + 6y - z + 14t & = 4
 \end{array}$$

$$\begin{array}{rcl}
 & x + z - t & = -3 \\
 (13) \quad - & 4x + y - 2z + 3t & = 4 \\
 - & 3x + y + 3z & = 1 \\
 - & x + 7z - 3t & = 3
 \end{array}$$

$$\begin{array}{rcl}
 & x - 2y + z - 2t & = -7 \\
 (14) \quad & 2x - 3y + 2z - 4t & = -11 \\
 - & 2x + y - z + 3t & = 6 \\
 & 3x + 2y - 2z - t & = -2
 \end{array}$$

$$\begin{array}{rcl}
 & x - y - t & = -3 \\
 (15) \quad - & 2x + 3y + z + 2t & = 10 \\
 & 3x + z - t & = -3 \\
 & 7x - 3y - 3t & = -17
 \end{array}$$

$$\begin{array}{rcl}
 & 3x - y & = 0 \\
 (16) \quad & 3x + 2y + z & = -5 \\
 - & 3x + y - 2z & = 5
 \end{array}$$

$$\begin{array}{rcl}
 & 2x - y + 3z & = -9 \\
 (17) \quad & 4x + 2y + 3z & = 0 \\
 - & x + 4y + 6z & = 0
 \end{array}$$