

Riešte sústavy rovníc sčítacou aj dosadzovacou metódou.

1.

$$\begin{aligned}x + 2y &= 5 \\ 3x - 2y &= 7\end{aligned}$$

$$K = \{[3; 1]\}$$

2.

$$\begin{aligned}x + y &= 5 \\ 3x - 2y &= 5\end{aligned}$$

$$K = \{[3; 2]\}$$

3.

$$\begin{aligned}3x + 4y &= -1 \\ 7x - 5y &= 12\end{aligned}$$

$$K = \{[1; -1]\}$$

Riešte sústavy lineárnych rovníc.

4.

$$\begin{aligned}x + 2y + z &= 4 \\ 3x - 2y &= 1 \\ y + 5z &= 6\end{aligned}$$

$$K = \{[1; 1; 1]\}$$

5.

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

$$K = \{[2; 1; 0]\}$$

6.

$$\begin{aligned}x + 2y + 3z &= 4 \\ 3x - 2y + 3z &= 4 \\ 2x + 3z &= 6\end{aligned}$$

$$K = \{ \}$$

7.

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

$$K = \left\{ \left[\frac{4-3z}{2}, \frac{4-3z}{4}, z \right]; z \in R \right\}$$

8.

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

$$K = \{ \}$$

9.

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

$$K = \left\{ \left[-2 - 3z, \frac{-11 - 9z}{2}, z \right]; z \in R \right\}$$

Riešte sústavy rovníc.

10.

$$\begin{aligned}x + 3y &= 4 \\ x^2 + 2x + y^2 &= 4\end{aligned}$$

$$K = \{[-2; 2], [1; 1]\}$$

11.

$$x + y = 4$$

$$2x^2 + xy + y^2 = 14$$

$$K = \{[1; 3]\}$$

12.

$$4x + 3y = 1$$

$$x^2 + xy + y^2 + 2y = -1$$

$$K = \{[1; -1], [16/13; -17/13]\}$$

Riešte rovnice s parametrom t a neznámou x .

13. $\sqrt{x+2t} = 4$

t	K
R	$\{16 - 2t\}$

14. $\frac{1-3x}{t+2} = \frac{x-5}{5}$

t	K
-2	nemá zmysel
-17	$\{ \}$
$R - \{-2; -17\}$	$\left\{ \frac{5t+15}{t+17} \right\}$

15. $x^2 - t^2 + 4t = 4$

t	K
R	$\{2-t; t-2\}$

