

получаем: $A^{-1} = \begin{pmatrix} -\frac{1}{3} & \frac{1}{3} & 1 \\ 1 & 0 & -3 \\ -\frac{4}{3} & -\frac{2}{3} & 5 \end{pmatrix}$

$$X = \begin{pmatrix} 1 & -2 & 3 \\ 2 & 1 & 0 \end{pmatrix} \begin{pmatrix} -\frac{1}{3} & \frac{1}{3} & 1 \\ 1 & 0 & -3 \\ -\frac{4}{3} & -\frac{2}{3} & 5 \end{pmatrix}$$

$$= \frac{1}{3} \begin{pmatrix} -19 & -5 & 66 \\ 1 & 2 & -3 \end{pmatrix}$$

3г 5.

$$1. \begin{cases} 2x + 5y = 1 \\ 3x + 7y = 2 \end{cases}$$

$$2. \begin{cases} 2x - 3y = 4 \\ 4x - 5y = 10 \end{cases}$$

$$\Delta = \begin{vmatrix} 2 & 5 \\ 3 & 7 \end{vmatrix} = 14 - 15 = -1$$

$$\Delta = \begin{vmatrix} 2 & -3 \\ 4 & -5 \end{vmatrix} = -10 + 12 = 2$$

$$\Delta x = \begin{vmatrix} 1 & 5 \\ 2 & 7 \end{vmatrix} = 7 - 10 = -3$$

$$\Delta x = \begin{vmatrix} 4 & -3 \\ 10 & -5 \end{vmatrix} = -20 + 30 = 10$$

$$\Delta y = \begin{vmatrix} 2 & 1 \\ 3 & 2 \end{vmatrix} = 4 - 3 = 1$$

$$\Delta y = \begin{vmatrix} 2 & 4 \\ 4 & 10 \end{vmatrix} = 20 - 16 = 4$$

$$y = \frac{\Delta y}{\Delta} = \frac{1}{-1} = -1$$

$$x = \frac{\Delta x}{\Delta} = \frac{10}{2} = 5$$

$$x = \frac{\Delta x}{\Delta} = \frac{-3}{-1} = 3$$

$$y = \frac{\Delta y}{\Delta} = \frac{4}{2} = 2$$