

$$4. \begin{cases} 2x - y + 3z = 14 \\ 3x - 5y + z = 14 \\ 4x - 7y + 2z = 18 \end{cases}$$

$$\Delta = \begin{vmatrix} 2 & -1 & 3 \\ 3 & -5 & 1 \\ 4 & -7 & 2 \end{vmatrix} = -20 - 4 - 63 - (-60 - 14 - 6) \\ = -87 + 80 = -7$$

$$\Delta x = \begin{vmatrix} 14 & -1 & 3 \\ 14 & -5 & 1 \\ 18 & -7 & 2 \end{vmatrix} = -140 - 18 - 294 - (-270 - 28 - 98) \\ = -452 + 396 = -56$$

$$\Delta y = \begin{vmatrix} 2 & 14 & 3 \\ 3 & 14 & 1 \\ 4 & 18 & 2 \end{vmatrix} = 56 + 56 + 162 - (168 + 36 + 84) \\ = 274 - 288 = -14$$

$$\Delta z = \begin{vmatrix} 2 & -1 & 14 \\ 3 & -5 & 14 \\ 4 & -7 & 18 \end{vmatrix} = -180 - 56 - 294 - (-280 - 196 - 54) \\ = -530 + 530 = 0$$

$$\Delta x = x = \frac{\Delta x}{\Delta} = 8, \quad y = \frac{\Delta y}{\Delta} = 2, \quad z = \frac{\Delta z}{\Delta} = 0$$

$$2 \times 8 - 2 = 14$$

$$3 \times 8 - 10 = 14$$

$$4 \times 8 - 14 = 18$$

результат верен. Ответ в учебнике неправилен.