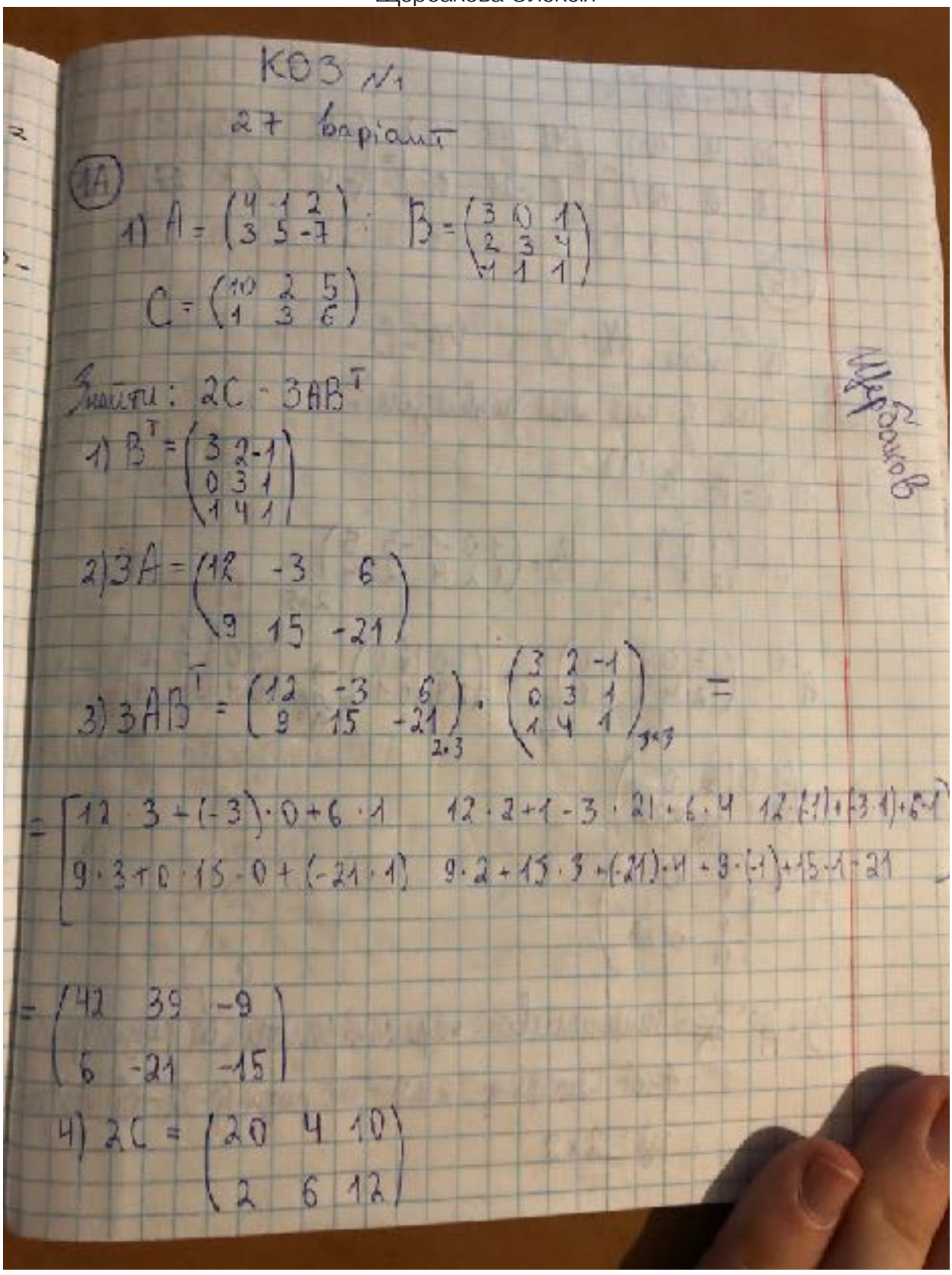
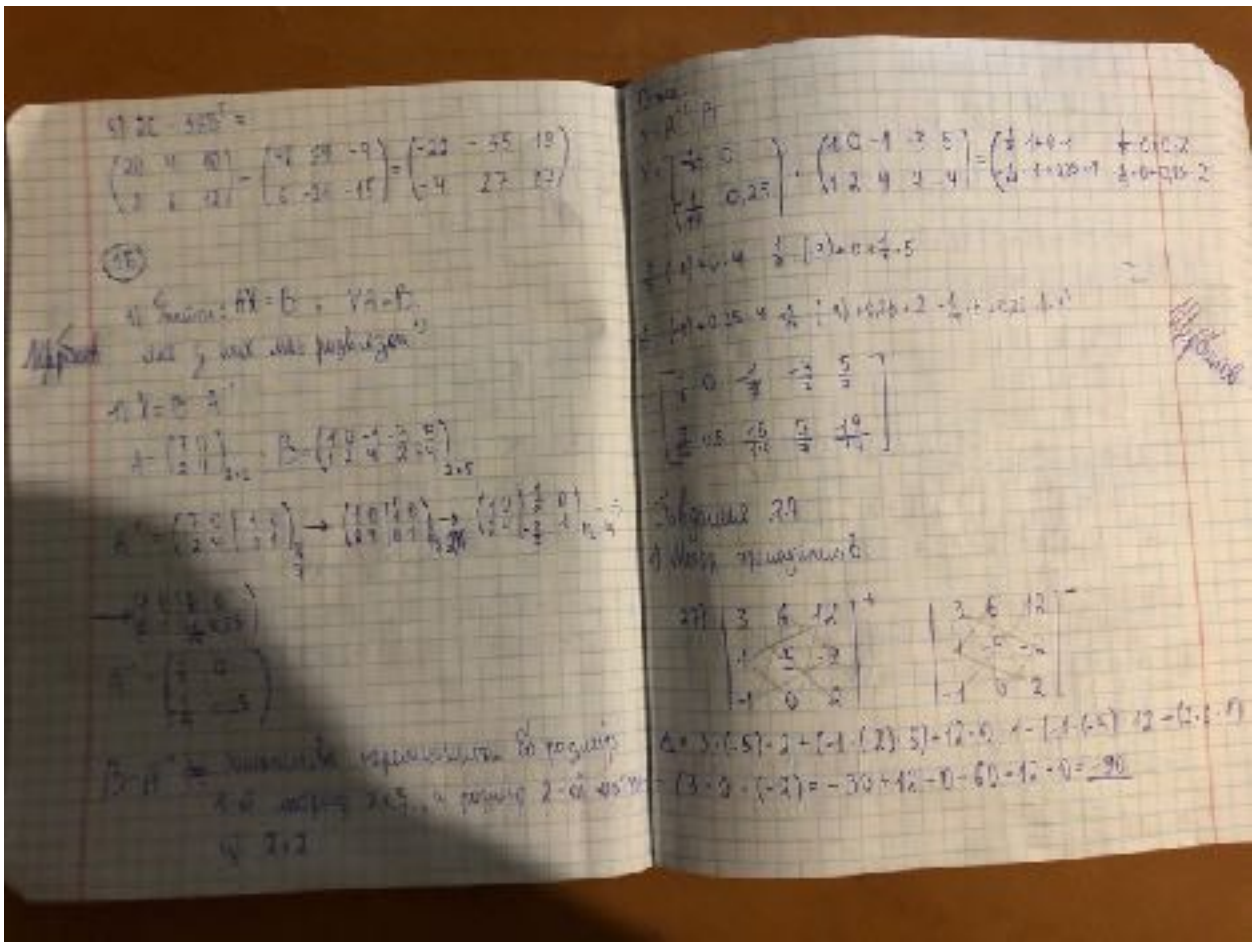
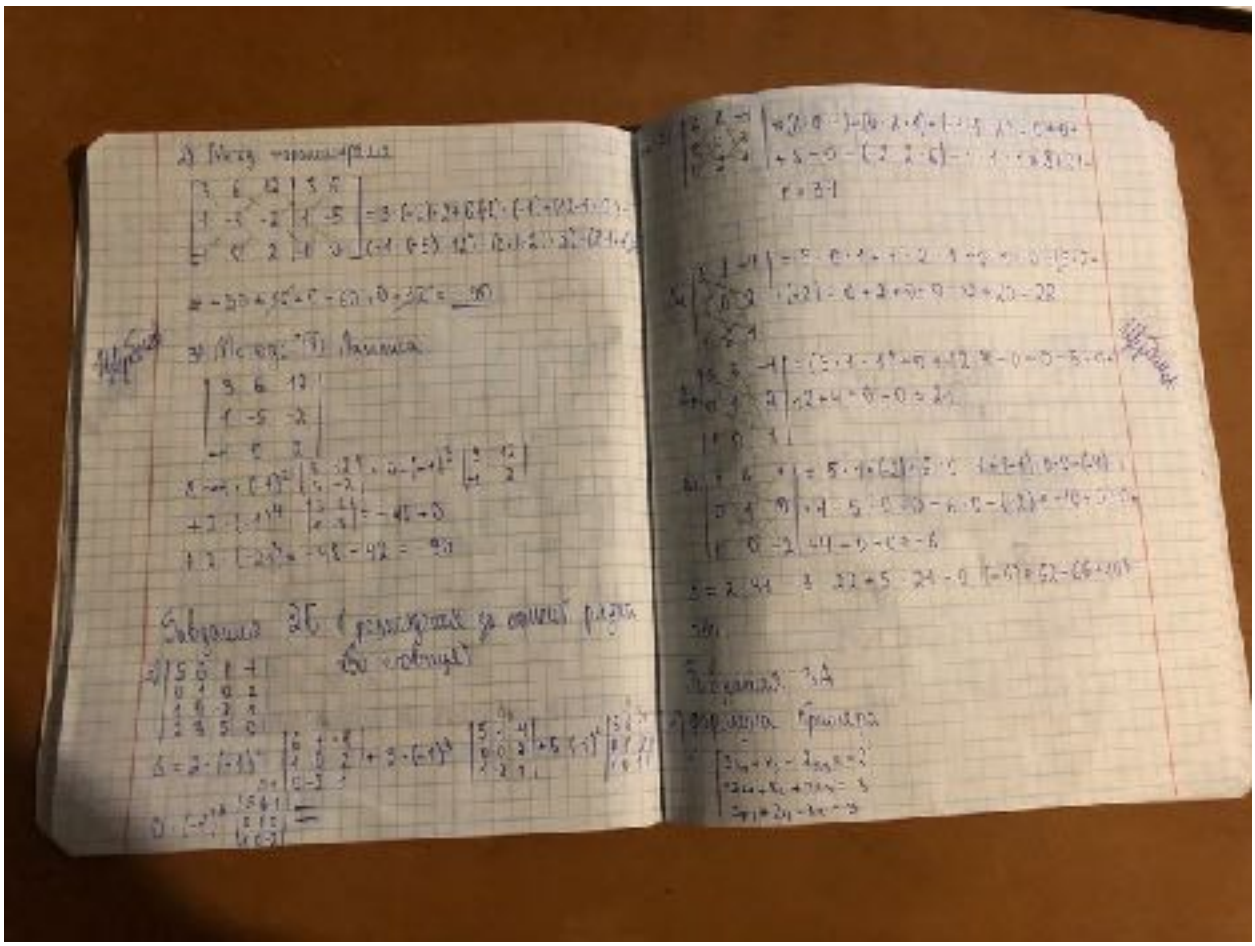
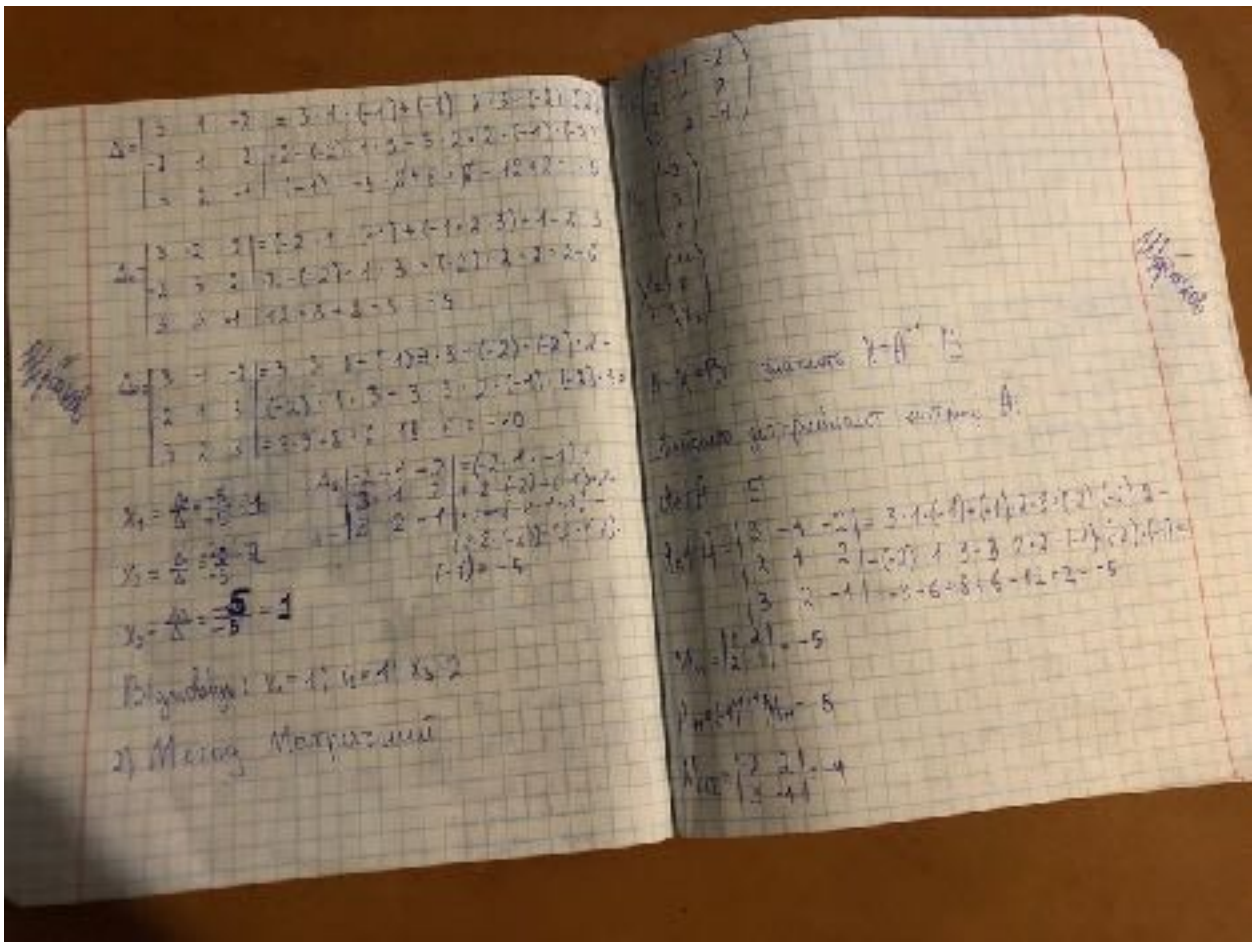
КОЗ за модулем 1
Завдання 1-4
Групи: 6.04.125.010.21.3
Щербакова Олексія



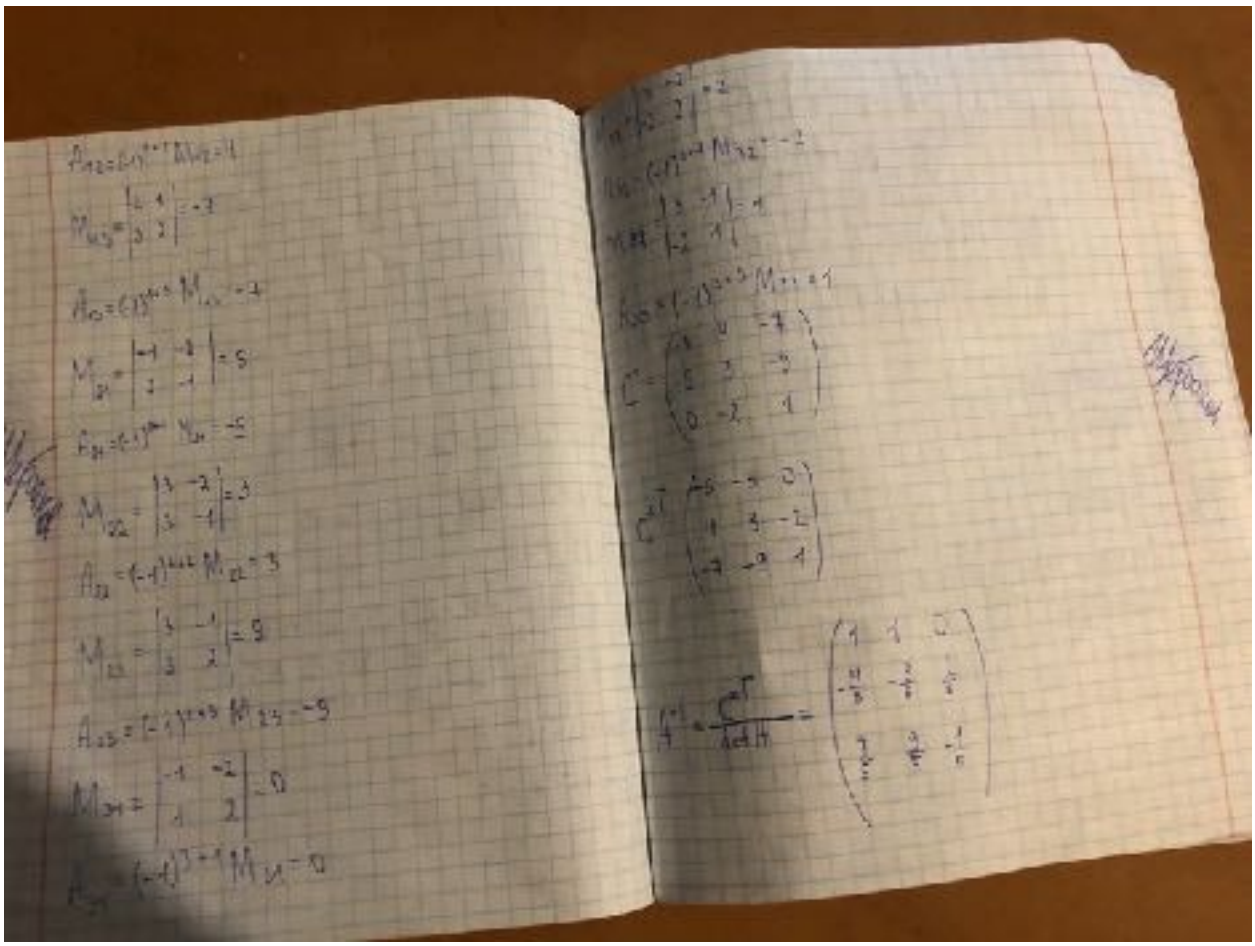






Відповідь: $x_1 = 1$; $x_2 = 1$; $x_3 = 2$

2) Метод Матричний



$$X = A^{-1} \cdot B = \begin{pmatrix} 1 & 1 & 0 \\ -\frac{4}{5} & -\frac{3}{5} & \frac{2}{5} \\ \frac{7}{5} & \frac{9}{5} & -\frac{1}{5} \end{pmatrix} \cdot \begin{pmatrix} -2 \\ 3 \\ 3 \end{pmatrix} =$$

$$= \begin{pmatrix} 1 \cdot (-2) + 1 \cdot 3 + 0 \cdot 3 \\ \left(-\frac{4}{5}\right) \cdot (-2) + \left(-\frac{3}{5}\right) \cdot 3 + \frac{2}{5} \cdot 3 \\ \frac{7}{5} \cdot (-2) + \frac{9}{5} \cdot 3 + \left(-\frac{1}{5}\right) \cdot 3 \end{pmatrix} = \begin{pmatrix} -2+3+0 \\ \frac{8}{5} - \frac{9}{5} + \frac{6}{5} \\ -\frac{14}{5} + \frac{27}{5} - \frac{3}{5} \end{pmatrix} =$$

$$= \begin{pmatrix} 1 \\ 1 \\ 2 \end{pmatrix}$$

Матвєєв

Відповідь:

$$\begin{cases} x_1 = 1 \\ x_2 = 1 \\ x_3 = 2 \end{cases}$$