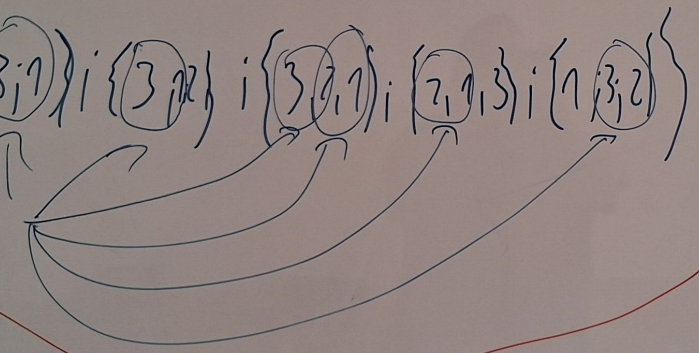
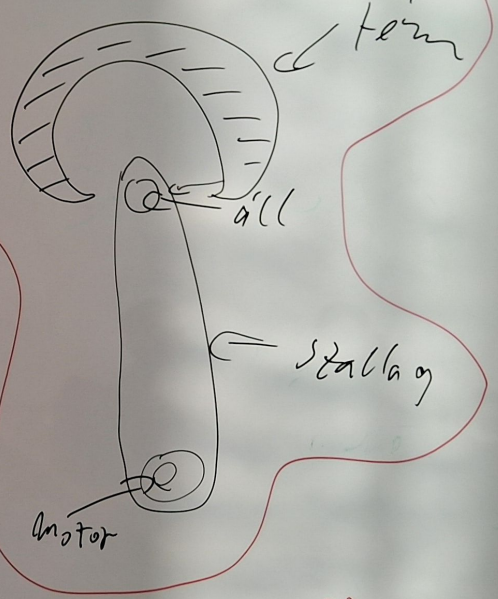
III Permutáció:

$H = \{1; 2; 3\}$

$\xi_{ijk} = \{\{1,2,3\}; \{2,3,1\}; \{3,1,2\}; \{3,2,1\}; \{2,1,3\}; \{1,3,2\}\}$

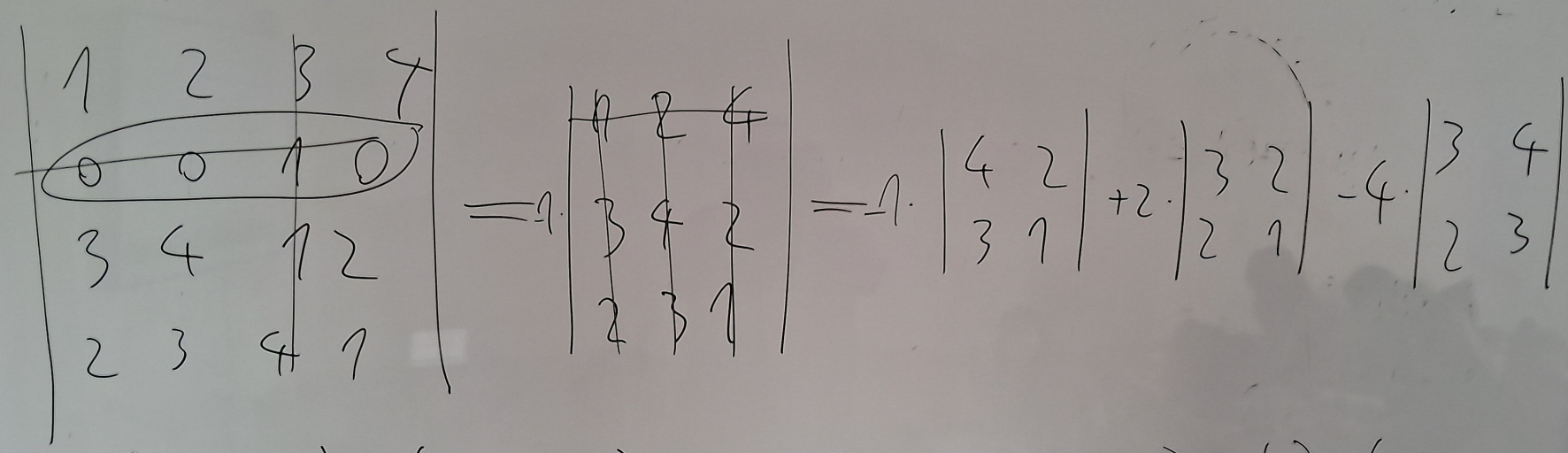
inverziók





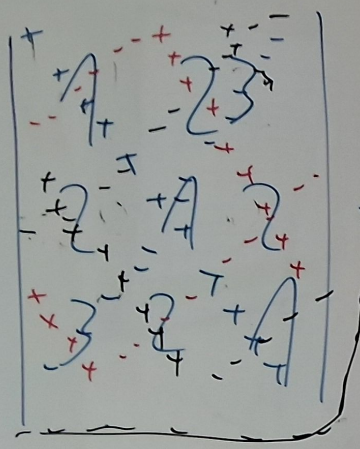
$$\begin{vmatrix} 1 & 2 & 3 \\ 2 & 3 & 1 \\ 3 & 1 & 2 \end{vmatrix} = 1 \cdot \begin{vmatrix} 3 & 1 \\ 1 & 2 \end{vmatrix} - 2 \cdot \begin{vmatrix} 2 & 1 \\ 3 & 2 \end{vmatrix} + 3 \cdot \begin{vmatrix} 2 & 3 \\ 3 & 1 \end{vmatrix} =$$

$$= (3 \cdot 2 - 1 \cdot 1) - 2(2 \cdot 2 - 1 \cdot 3) + 3(2 \cdot 1 - 3 \cdot 3) = 5 - 2 \cdot 1 + 3 \cdot (-7) = -18$$



$$= -1 \cdot \begin{vmatrix} 4 & 2 \\ 3 & 1 \end{vmatrix} + 2 \cdot \begin{vmatrix} 3 & 2 \\ 2 & 1 \end{vmatrix} - 4 \cdot \begin{vmatrix} 3 & 4 \\ 2 & 3 \end{vmatrix} =$$

$$= -(4 \cdot 1 - 2 \cdot 3) + 2(3 \cdot 1 - 2 \cdot 2) - 4(3 \cdot 3 - 4 \cdot 2) = +2 + 2(-1) - 4(1) = \underline{-4}$$

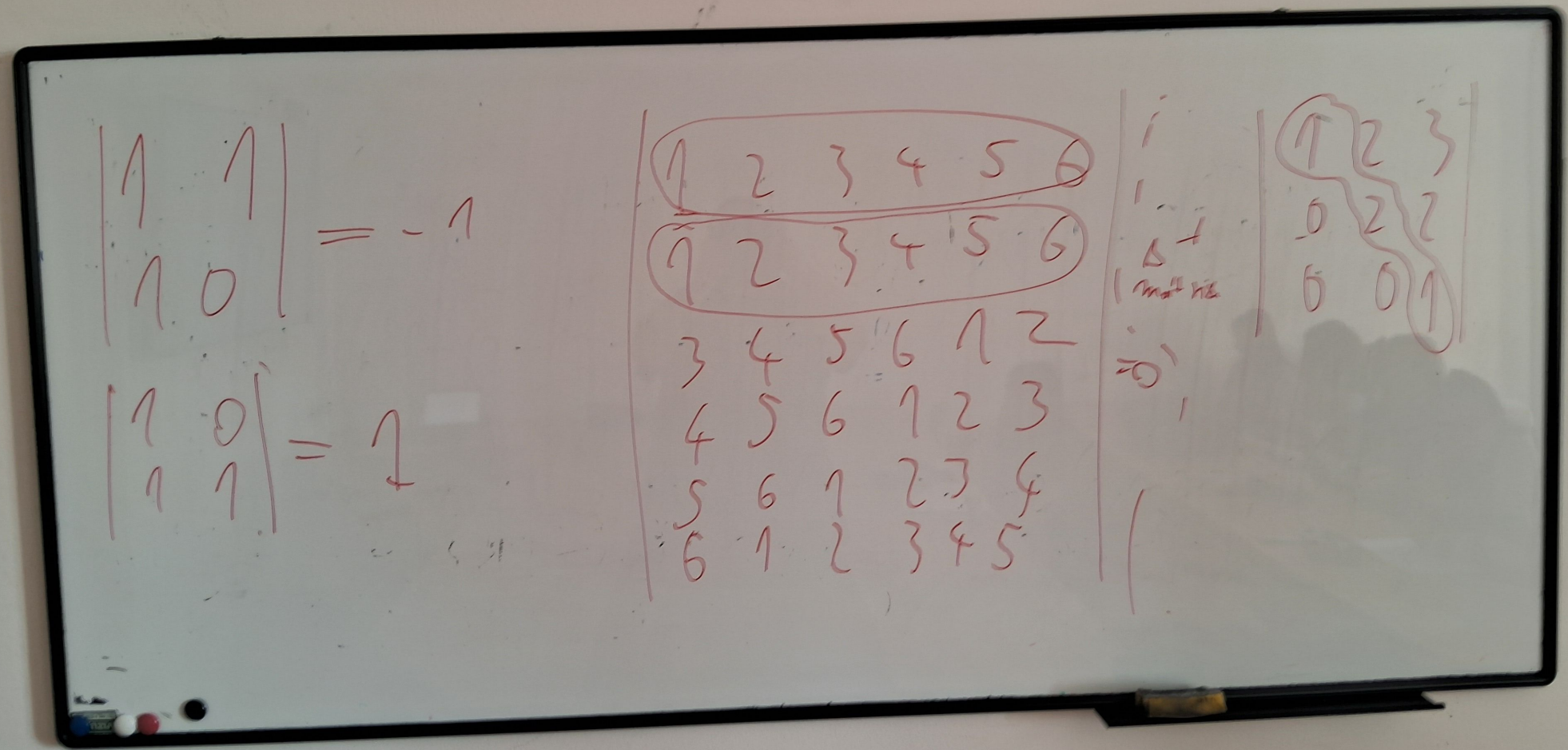


$= 1\cdot 1\cdot 1 + 2\cdot 2\cdot 3 + 3\cdot 2\cdot 2 - 3\cdot 1\cdot 3 - 2\cdot 2\cdot 1 - 1\cdot 2\cdot 2 =$

$= 7 + 12 + 12 - 9 - 4 - 4 = \underline{\underline{8}}$

$1\cdot\begin{vmatrix} 1 & 2 \\ 2 & 1 \end{vmatrix} - 2\cdot\begin{vmatrix} 2 & 2 \\ 3 & 1 \end{vmatrix} + 3\cdot\begin{vmatrix} 2 & 1 \\ 3 & 2 \end{vmatrix} = (1\cdot 1 - 2\cdot 2) - 2(2\cdot 1 - 2\cdot 3) + 3(2\cdot 2 - 1\cdot 3) =$

$= -3 - 2(-4) + 3(1) = -3 + 8 + 3 = \underline{\underline{8}}$


$\begin{vmatrix} 1 & 1 \\ 1 & 0 \end{vmatrix} = -1$
$\begin{vmatrix} 1 & 0 \\ 1 & 1 \end{vmatrix} = 1$
1 2 3 4 5 6
1 2 3 4 5 6
3 4 5 6 1 2
4 5 6 1 2 3
5 6 1 2 3 4
6 1 2 3 4 5
i
1
Δ⁻¹
matrix
=0
1
1 2 3
0 2 2
0 0 1

Tk 20/2.4.

Gauss elimináció

$$\det(B) = \begin{vmatrix} 0 & -4 & 6 \\ 1 & -2 & 3 \\ 1 & 0 & 2 \end{vmatrix} \longrightarrow - \begin{vmatrix} 1 & -2 & 3 \\ 0 & -4 & 6 \\ 1 & 0 & 2 \end{vmatrix} \longrightarrow - \begin{vmatrix} 1 & -2 & 3 \\ 0 & -4 & 6 \\ 0 & 2 & -1 \end{vmatrix} \longrightarrow$$

(I) ↔ (II) (III) − (I) (III) + $\frac{1}{2}$(II)

$$- \begin{vmatrix} 1 & -2 & 3 \\ 0 & -4 & 6 \\ 0 & 0 & 2 \end{vmatrix} = +8$$