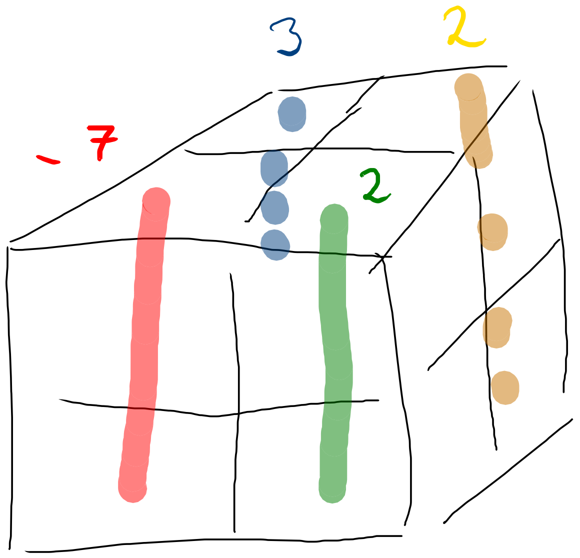


$$\Longrightarrow \quad V\left(\begin{pmatrix} 3 & 2 \\ -7 & 2 \end{pmatrix}\right) = \frac{1}{\sqrt{2}} \boxed{\begin{matrix} z_1^3 z_1^2 z_1^2 z_1^{-7} \\ - \\ z_2^3 z_2^2 z_2^2 z_2^{-7} \end{matrix}}$$

- $\| V(\gamma) \| = 1$
- $\langle V(\gamma_1), V(\gamma_2) \rangle = \langle \frac{1}{\sqrt{n}} \mathbb{1}, V(\gamma_2 - \gamma_1) \rangle$
- $V\left(\begin{array}{|c|c|} \hline 1 & 0 \\ \hline 0 & 0 \\ \hline \end{array}\right), V\left(\begin{array}{|c|c|} \hline 0 & 0 \\ \hline 1 & 0 \\ \hline \end{array}\right)$ ONB ; $V\left(\begin{array}{|c|c|} \hline 1 & 0 \\ \hline 0 & 0 \\ \hline \end{array}\right), V\left(\begin{array}{|c|c|} \hline 0 & 1 \\ \hline 0 & 0 \\ \hline \end{array}\right)$ ONB stb.

$$G(\gamma) := \left| \left\langle \frac{1}{\sqrt{n}} \underline{1}, v(\gamma) \right\rangle \right|^2$$

pl.: $e_1 = \begin{bmatrix} 1 & 0 \\ 0 & 0 \end{bmatrix}$, $e_2 = \begin{bmatrix} 0 & 1 \\ 0 & 0 \end{bmatrix}$

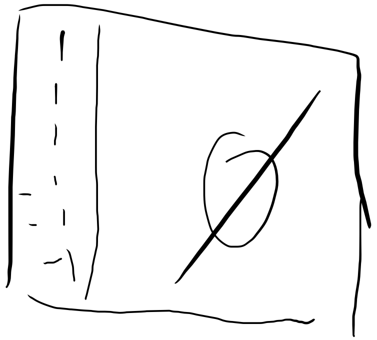
$\hookrightarrow$

- $G(0) = \underline{1}$
- $G(\gamma) \in [0, \underline{1}]$,
- $\sum_{k=1}^{n} G(\gamma + e_k) = \underline{1}$ ahol $(e_k)_{k=1}^{n}$ azok csupa nulla 1 db 1-es egy sor / oszlop mentén

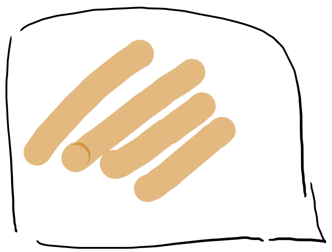
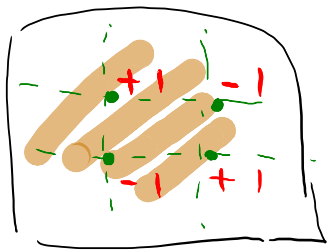
$$\bar{G}(\gamma) := \frac{1}{n!\,n!} \sum G(\text{sor, oszlop permutációi } \gamma\text{-nak})$$

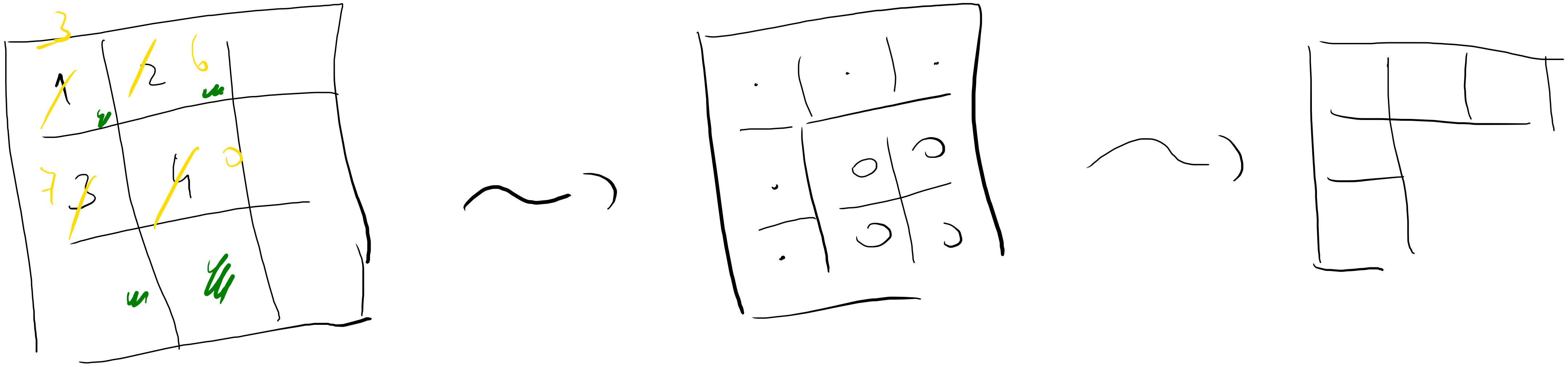
$$\tilde{G}(\gamma) := \frac{1}{2} \bar{G}(\gamma) + \frac{1}{2} \bar{G}(-\gamma)$$

$G(1,1,1,-1,-1,-1) \overset{?}{=} 0$ Nem, de... ez

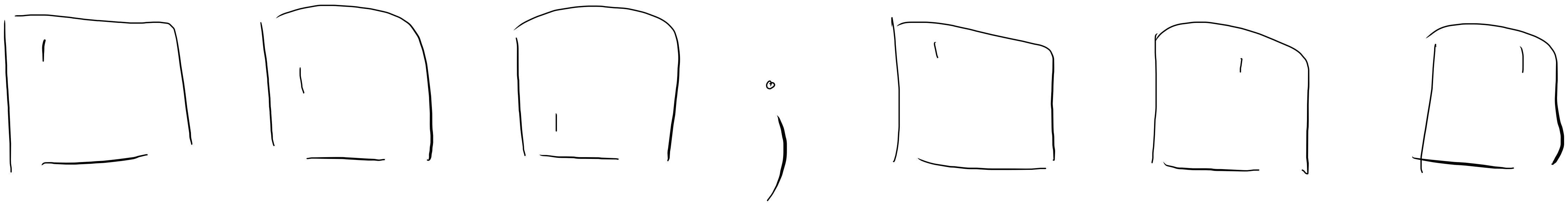
$G\Big($  $\Big) \overset{?}{=} 0$ még lehet!

Extra egyenletek:

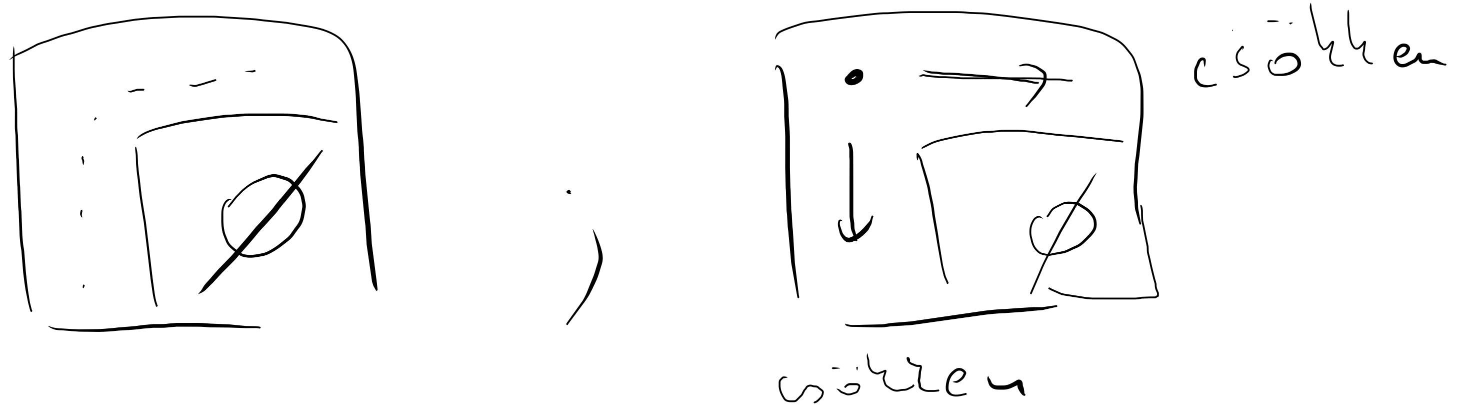
$G\Big($  $\Big) \overset{!}{=} G\Big($  $\Big)$



Csak 2 parketta-egyenlet lesz :



Belátható: minden ekv. osztályban van olyan γ, amely:



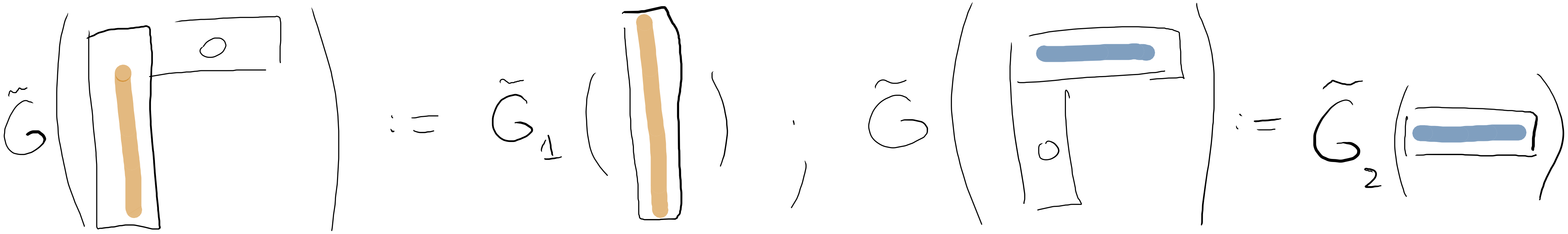
De: ~~egyértelműség~~

$$\begin{array}{|c|c|c|}\hline 3 & 1 & -1 \\ \hline -1 & 0 & 0 \\ \hline -2 & 0 & 0 \\ \hline \end{array} \sim \begin{array}{|c|c|c|}\hline 0 & 4 & -1 \\ \hline 0 & -1 & 0 \\ \hline 0 & -2 & \\ \hline \end{array} \sim \begin{array}{|c|c|c|}\hline 4 & 0 & -1 \\ \hline -1 & 0 & 0 \\ \hline -2 & 0 & 0 \\ \hline \end{array} \Rightarrow \begin{array}{|c|c|c|}\hline 3 & 1 & -1 \\ \hline -1 \\ \cline{1-1} -2 \\ \cline{1-1} \end{array} \sim \begin{array}{|c|c|c|}\hline 4 & 0 & -1 \\ \hline -1 \\ \cline{1-1} -2 \\ \cline{1-1} \end{array}$$

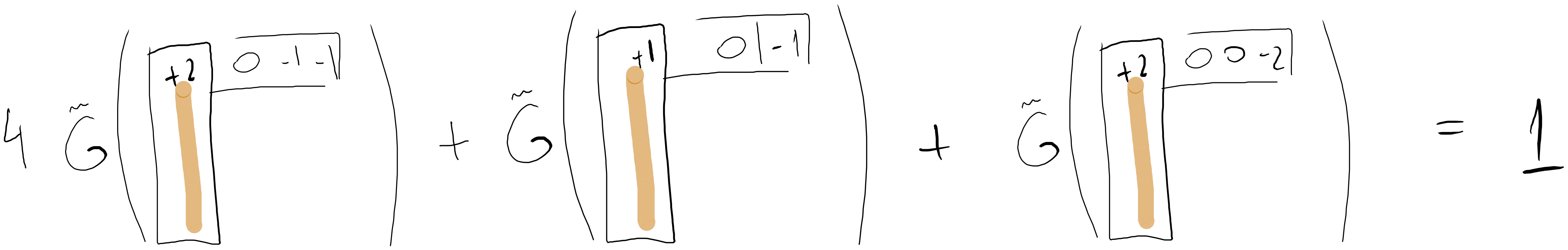
$$\substack{\min \\ \max} \tilde{G} \begin{pmatrix} & \boxed{\quad \gamma \quad} \\ \boxed{0} & \end{pmatrix} \stackrel{?}{=} \substack{\min \\ \max} \tilde{G} \left(\boxed{\quad \gamma \quad} \right)$$

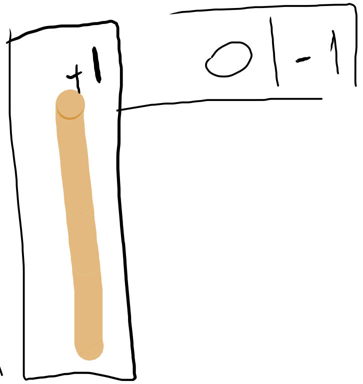
? H :

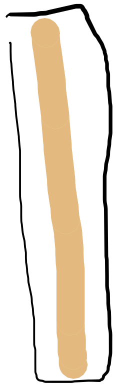
$$\tilde{G}_H \left(\boxed{\quad \gamma \quad} \right) \notin \left[\min \tilde{G} \begin{pmatrix} & \boxed{\quad \gamma \quad} \\ \boxed{0} & \end{pmatrix} , \max \tilde{G} \begin{pmatrix} & \boxed{\quad \gamma \quad} \\ \boxed{0} & \end{pmatrix} \right]$$

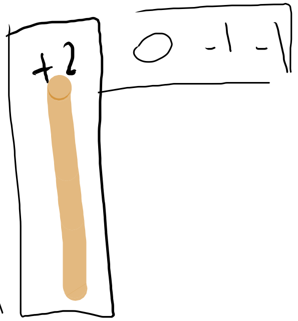


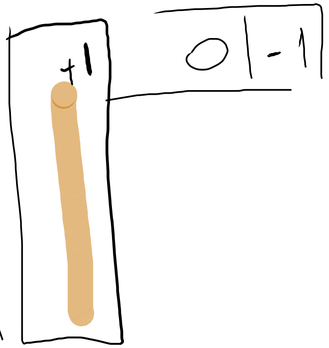
kérdés: van megoldás?

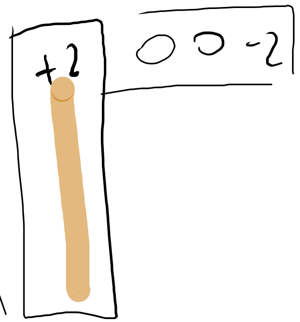


$5\tilde{G}\Bigg($ 

$\Bigg) + \tilde{G}_1\Bigg($  $\Bigg) = 1$

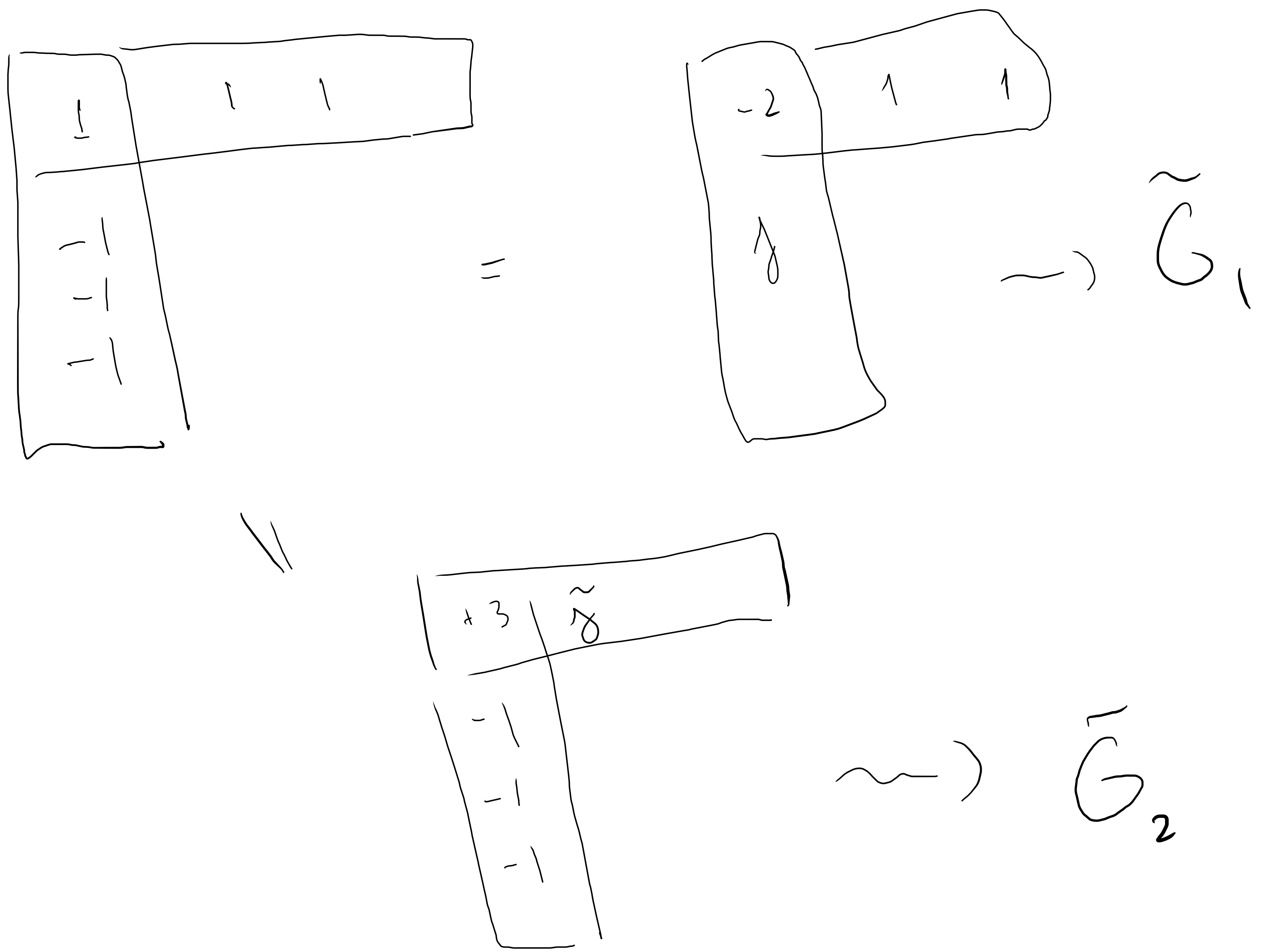
$4\tilde{G}\Bigg($ 

$\Bigg) + \tilde{G}\Bigg($ 

$\Bigg) + \tilde{G}\Bigg($ 

$\Bigg) = 1$

$\ldots$


1 1 1
-1
-1
-1
=
-2 1 1
γ
$\rightsquigarrow \tilde{G}_1$
+3 $\tilde{\gamma}$
-1
-1
-1
$\rightsquigarrow \bar{G}_2$