

$$\{H_{12}\}, \{H_{21}(2), H_{31}(-3)\}, \{H_{23}(1), H_{11}(-1)\}, \{H_{12}(4), H_{32}(6)\}, \\ \{H_3(-\frac{1}{72})\}, \{H_{13}(42), H_{23}(9)\}$$

$$[A : I_3] = \begin{bmatrix} 2 & -1 & -3 & 1 & 0 & 0 \\ -1 & 4 & 6 & 0 & 1 & 0 \\ -3 & 6 & 0 & 0 & 0 & 1 \end{bmatrix} \sim \begin{bmatrix} -1 & 4 & 6 & 0 & 1 & 0 \\ 2 & -1 & -3 & 1 & 0 & 0 \\ -3 & 6 & 0 & 0 & 0 & 1 \end{bmatrix} \sim$$

$H_{12} \qquad \qquad \qquad H_{21}(2), H_{31}(-3)$

$$\begin{bmatrix} -1 & 4 & 6 & 0 & 1 & 0 \\ 0 & 7 & 9 & 1 & 2 & 0 \\ 0 & -6 & -18 & 0 & -3 & 1 \end{bmatrix} \sim \begin{bmatrix} 1 & -4 & -6 & 0 & -1 & 0 \\ 0 & 1 & -9 & 1 & -1 & 1 \\ 0 & -6 & -18 & 0 & -3 & 1 \end{bmatrix} \sim$$

$H_{23}(1), H_{11}(-1) \qquad \qquad \qquad H_{12}(4), H_{32}(6)$

$$\begin{bmatrix} 1 & 0 & -42 & 4 & -5 & 4 \\ 0 & 1 & -9 & 1 & -1 & 1 \\ 0 & 0 & -72 & 6 & -9 & 7 \end{bmatrix} \sim \begin{bmatrix} 1 & 0 & -42 & 4 & -5 & 4 \\ 0 & 1 & -9 & 1 & -1 & 1 \\ 0 & 0 & 1 & -\frac{1}{12} & \frac{1}{8} & -\frac{7}{72} \end{bmatrix} \sim$$

$H_3(-\frac{1}{72}) \qquad \qquad \qquad H_{13}(42), H_{23}(9)$

$$\begin{bmatrix} 1 & 0 & 0 & \frac{1}{2} & \frac{1}{4} & -\frac{1}{12} \\ 0 & 1 & 0 & \frac{1}{4} & \frac{1}{8} & \frac{1}{8} \\ 0 & 0 & 1 & -\frac{1}{12} & \frac{1}{8} & -\frac{7}{72} \end{bmatrix} = [I_3 : A^{-1}]$$

bulunur. Böylece $A^{-1} = \begin{bmatrix} \frac{1}{2} & \frac{1}{4} & -\frac{1}{12} \\ \frac{1}{4} & \frac{1}{8} & \frac{1}{8} \\ -\frac{1}{12} & \frac{1}{8} & -\frac{7}{72} \end{bmatrix}$ dir. Ayrıca $(A^{-1})^t = A^{-1}$

eşitliği de sağlanır. Şu halde A^{-1} de simetriktir.