

zájmy ... například tento týden (elidné drív, požad nřtubjřk)

konference < discord
room meeting

14.5, 14.6 (samı projektře / adyře rebyde ěs)

břze B ... b_1, b_2, \dots, b_m

břze A ... a_1, a_2, \dots, a_m

$$[v]_B = \begin{pmatrix} \beta_1 \\ \beta_2 \\ \vdots \\ \beta_m \end{pmatrix} \quad v = \beta_1 \vec{b}_1 + \beta_2 \vec{b}_2 + \dots + \beta_m \vec{b}_m$$

$$\begin{pmatrix} | & | & & | \\ [b_1]_k & [b_2]_k & \dots & [b_m]_k \\ | & | & & | \end{pmatrix} = {}_k [id]_B$$

$${}_A [id]_B = {}_A [id]_k \cdot {}_k [id]_B = \left({}_k [id]_A \right)^{-1} \cdot {}_k [id]_B$$

$$(A | B) \sim \dots \sim (I | {}_A [id]_B)$$

metrum tole nřřbenı

Janřova dim. ... elementřnı řpravy ... nřřbenı maticemı elementřnıch řprav

$$(A | B) \sim (E_1 A | E_1 B) \sim (E_2 E_1 A | E_2 E_1 B) \sim \dots \sim (A^{-1} A | A^{-1} B) =$$

$$\left({}_k [id]_A \mid {}_k [I]_k \right) \sim \dots \sim \left(I \mid {}_A [id]_k \cdot {}_k [I]_k \right) = \left(I \mid {}_A [I]_k \right) = (I | A^{-1} B)$$

${}_k [I]_B$ nřřbenı ${}_k [I]_k = {}_k [I]_B \cdot {}_B [id]_k$

$$\left(\begin{array}{c|c} [id]_B & [f]_B \end{array} \right) \sim \dots \sim \left(I \mid \begin{array}{c} [id]_B \\ [f]_B \end{array} \right) \text{ to matrix, es chaste ;}$$

$$(A \cdot B)^T = B^T A^T$$

$$\begin{aligned} \left(\begin{array}{c|c} [id]_B^T & [f]_B^T \end{array} \right) &\sim \dots \sim \left(I \mid \underbrace{\left(\begin{array}{c} [id]_B^T \end{array} \right)^{-1} \cdot \left(\begin{array}{c} [f]_B^T \end{array} \right)} \right) \\ \left(A^{-1} \right)^T &= \left(A^{-1} \right)^T \\ &= \left([id]_B^{-1} \right)^T \cdot \left([f]_B \right)^T = \\ &= \left([id]_B \right)^T \cdot \left([f]_B \right)^T = \\ &= \left(\begin{array}{c} [f]_B \\ [id]_B \end{array} \right)^T \\ &= \left(\begin{array}{c} [f]_k \end{array} \right)^T \end{aligned}$$

inverse matice ✓, másobní matice ✓

$$(A \mid B) \sim \dots \sim (I \mid A^{-1} B)$$

$$id(x) = x$$

$$f(x)$$

def $id(x)$:
return x

$${}_A [id]_B \dots \underbrace{{}_A [id]_B \cdot [u]_B}_{\text{matice přechodu}} = [u]_A$$

souřadnice $id(u)$ v
nové bázi B

mapa.
 $f(u) = -2u$

$${}_A [f]_B [u]_B = \underbrace{[f(u)]_A}_{\text{souřadnice } f(u) \text{ v nové bázi } A}$$

