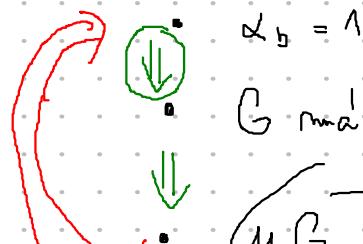


VĚTA NPJE:

G racionální
malice



$$\alpha_b = 1$$

G mat poly pravý invers $(\Delta D, \bar{D}^1)$

μG poly \Rightarrow μ poly



$$\left(\begin{array}{cccc} \frac{\alpha_1}{\beta_1} & 1 & \dots & 1 \\ \vdots & \vdots & \ddots & \vdots \\ 1 & 1 & \dots & 1 \end{array} \right) \cdot \frac{\alpha_b}{\beta_b}$$

UKAŽEME

$\alpha_b \neq 1 \Rightarrow$ majde μ :
 μG poly
a μ nel poly

G racionál!

Smithova forma

\square

$$G \cdot G^1 = \left(\begin{array}{cc} 1 & 1 \\ 1 & 1 \end{array} \right)$$

$$G = (\cancel{A} \cdot \cancel{\Gamma} \cdot \cancel{B}) \cdot \left(\begin{array}{cc} \cancel{\alpha_1} & \cancel{\beta_1} \\ \vdots & \vdots \\ \cancel{\alpha_b} & \cancel{\beta_b} \end{array} \right)^{-1}$$

$$\left(\begin{array}{cc} \cancel{\alpha_1} & \cancel{\beta_1} \\ \vdots & \vdots \\ \cancel{\alpha_b} & \cancel{\beta_b} \end{array} \right)^{-1} = \left(\begin{array}{cc} 1 & 0 \\ \vdots & \vdots \\ 1 & 0 \end{array} \right)$$

$$q_i G = A \cdot \Gamma \cdot B$$

$$F = \left(\begin{array}{ccccc} 1 & & & & 0 \\ \vdots & \ddots & & & \vdots \\ 1 & & & & 0 \end{array} \right)$$

$$G = A \cdot \left(\frac{\Gamma}{q} \right) \cdot B$$

$$\frac{\alpha_i}{q} \text{ nel frak}$$

$$G = A \cdot \left(\begin{array}{ccccc} \frac{\alpha_1}{\beta_1} & & & & 0 \\ & \ddots & & & \vdots \\ & & \frac{\alpha_b}{\beta_b} & & 0 \end{array} \right) \cdot B$$

$$\frac{\alpha_i}{\beta_i} \quad \alpha_i \neq \alpha_{i+1} \\ \beta_i \neq \beta_{i+1}$$

$$\left(\begin{array}{ccccc} 0 & \dots & 0 & \frac{\beta_b}{\alpha_b} \\ 1 & & & \vdots \\ \vdots & & & 1 \end{array} \right) \cdot \Gamma = \left(\begin{array}{ccccc} 0 & \dots & 0 & 1 & 0 \dots 0 \end{array} \right)$$

μG

$$\mu = \left(\frac{\beta_b}{\alpha_b} \right) e_b \cdot A^{-1} \cdot (A \Gamma B) = B_b \text{ poly}$$

$$\underline{\mu \cdot A} = \underbrace{\frac{\beta_b}{\alpha_b} e_b}_{\text{nel poly}} \Rightarrow \mu \text{ nel poly} \quad \square$$

$$\alpha_b \neq 1$$

$$\frac{\beta_b}{\alpha_b}$$

$$\frac{p}{q} = \dots - - - - -$$

$$\alpha_b \neq \beta_b$$

$$\frac{1}{1+\Delta} = 1 - - - - -$$

$$\frac{1}{D^k} = \bar{D}^{-k}$$

$$F[\underbrace{\Delta, \bar{D}^1}_{\text{poly}}]$$

F inv.

$$\Delta, \bar{D}^1$$

$$\frac{1}{P} \neq \Delta, \bar{D}^1, a_0 \cdot \bar{D}^0$$