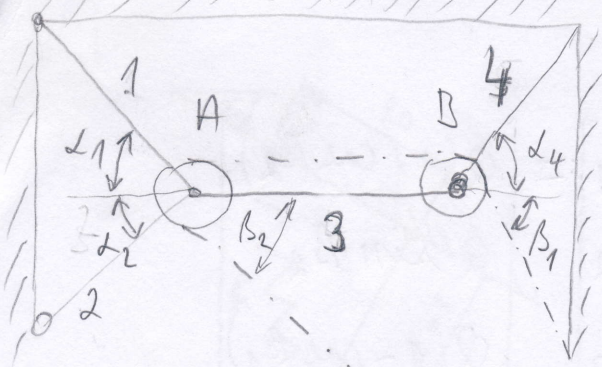
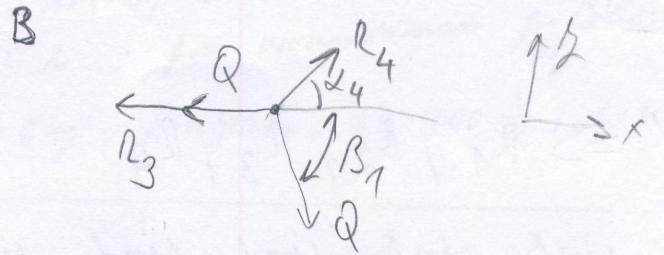
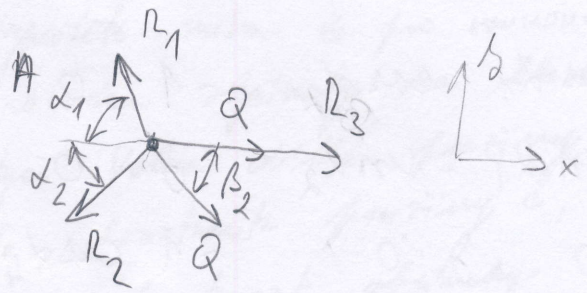


Přítok HB\_03



UVOLNĚNÍ:



$D: d_1, d_2, d_4, \beta_1, \beta_2, Q$

$U: R_1, R_2, R_3, R_4$

ROVNICE ROVNOVÁHY

A | x:  $R_3 + Q + Q \cos \beta_2 - R_1 \cos d_1 - R_2 \cos d_2 = 0$   
 y:  $R_1 \sin d_1 - R_2 \sin d_2 - Q \sin \beta_2 = 0$

B | x:  $-R_3 - Q + Q \cos \beta_1 + R_4 \cos d_4 = 0$   
 y:  $R_4 \sin d_4 - Q \sin \beta_1 = 0$

4 NEZ / 4 RCE

$-R_1 \cos d_1 - R_2 \cos d_2 + R_3 = -Q(1 + \cos \beta_2)$

$R_1 \sin d_1 - R_2 \sin d_2 = Q \sin \beta_2$

$-R_3 + R_4 \cos d_4 = Q(1 - \cos \beta_1)$

$R_4 \sin d_4 = Q \sin \beta_1$



# MATICOVÝ ZÁPIS:

HB-03

$$\begin{bmatrix} \cos \alpha_1 & \cos \alpha_2 & -1 & 0 \\ \sin \alpha_1 & -\sin \alpha_2 & 0 & 0 \\ 0 & 0 & -1 & \cos \alpha_4 \\ 0 & 0 & 0 & \sin \alpha_4 \end{bmatrix} \begin{bmatrix} R_1 \\ R_2 \\ R_3 \\ R_4 \end{bmatrix} = \begin{bmatrix} Q(1 + \cos \beta_2) \\ Q \sin \beta_2 \\ Q(1 - \cos \beta_1) \\ Q \sin \beta_1 \end{bmatrix}$$

$$\Rightarrow R_1, R_2, R_3, R_4$$

$Q, \sin \beta_1, \sin \beta_2, \sin \alpha_1, \sin \alpha_2, \sin \alpha_4, \cos \alpha_1, \cos \alpha_2, \cos \alpha_4, \cos \beta_1, \cos \beta_2$  JSOU KONSTANTY. MATICE LZE ŘEŠIT ELIMINACÍ NEBO POMOCÍ SOFTWARE