Suplented have

$$x_{2}^{1}(t) = x_{2}(t)$$

$$x_{2}^{1}(t) = u(t)$$

$$y(t) = x_{1}(t) + x_{2}(t)$$

$$a_{1} = \frac{1}{2} \cdot \int_{0}^{t} (x_{1}^{2}(t) + u^{2}(t)) dt^{\frac{1}{2}}$$

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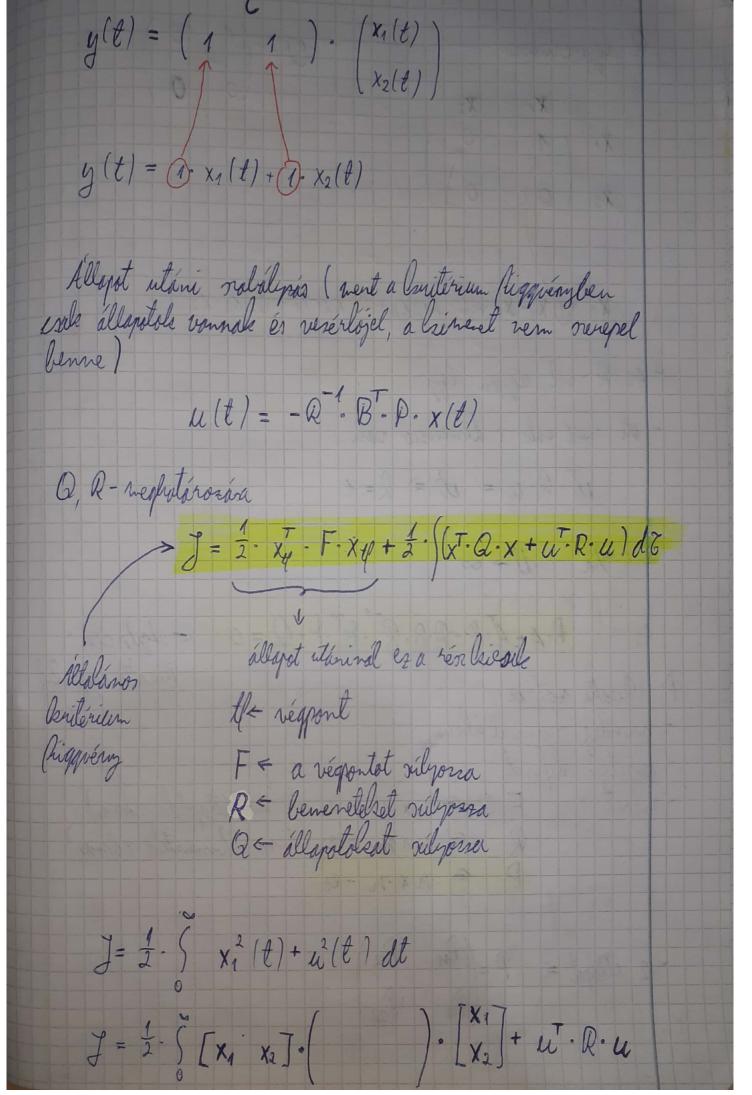
$$a_{1} = \frac{1}{2} \cdot \int_{0}^{t} (x_{1}^{2}(t) + u^{2}(t)) dt^{\frac{1}{2}}$$

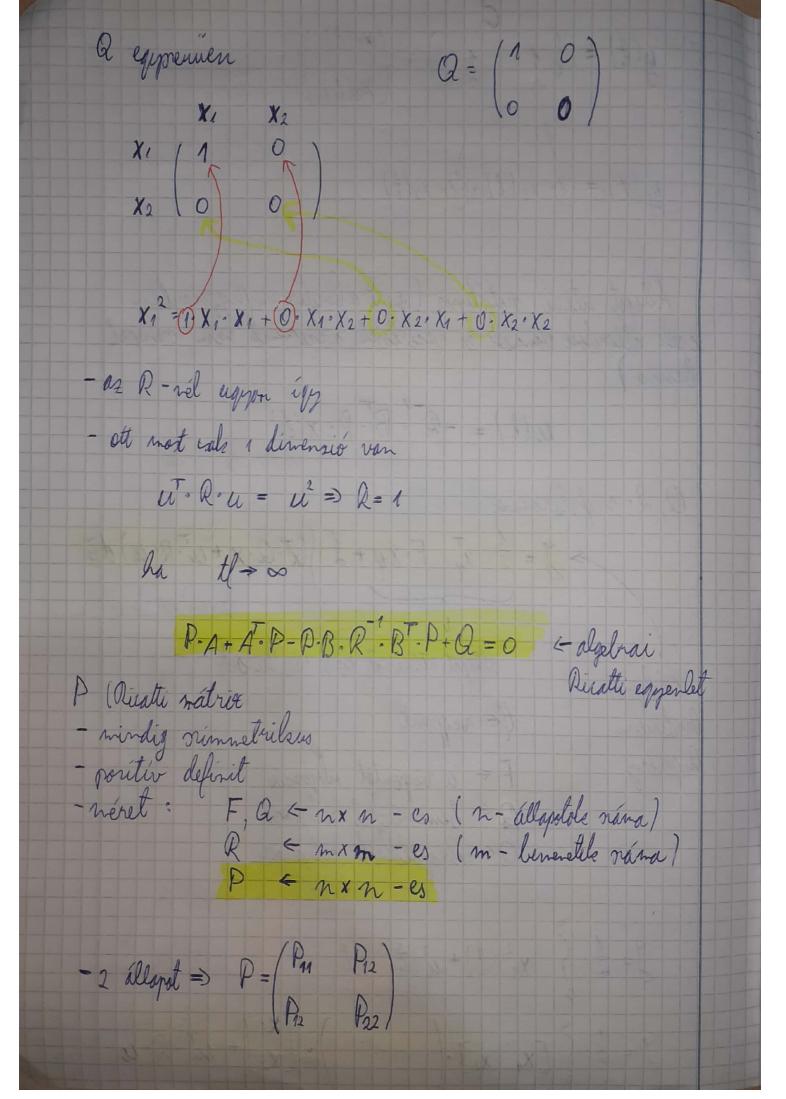
$$a_{1} = \frac{1}{2} \cdot \int_{0}^{t} (x_{1}^{2}(t) + u^{2}(t)) dt^{\frac{1}{2}}$$

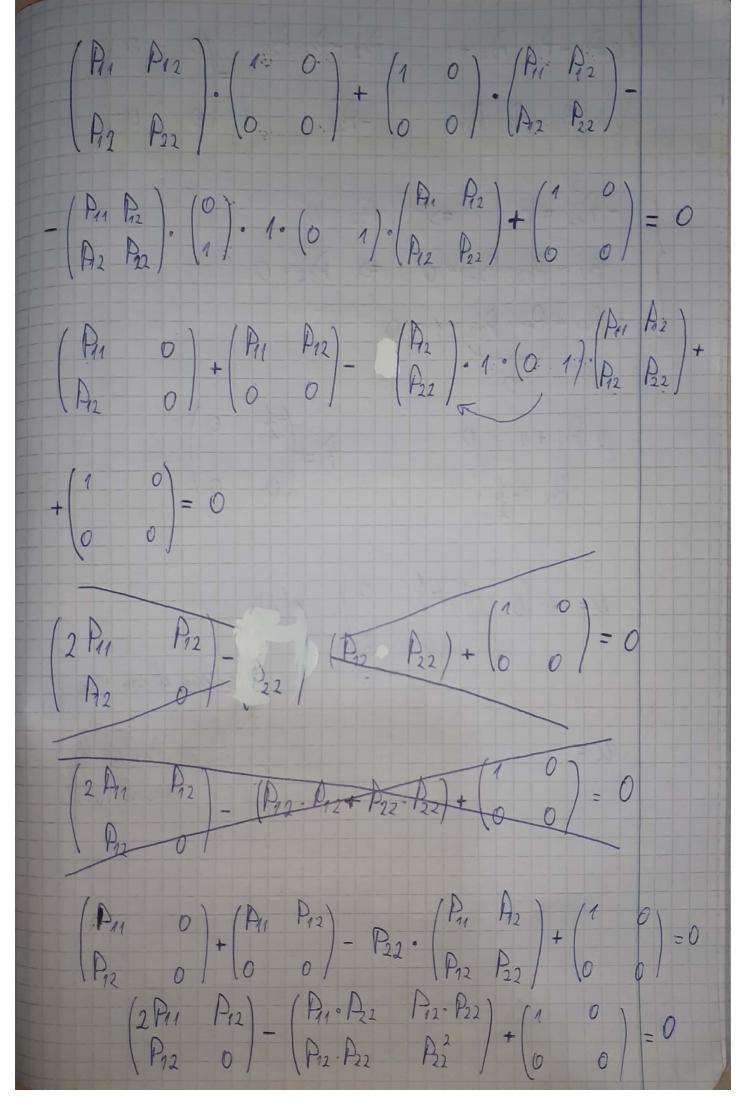
$$a_{1} = \frac{1}{2} \cdot \int_{0}^{t} (x_{1}^{2}(t) + u^{2}(t)) dt^{\frac{1}{2}}$$

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$$a_{1} = \int_{0}^{t} \int_$$





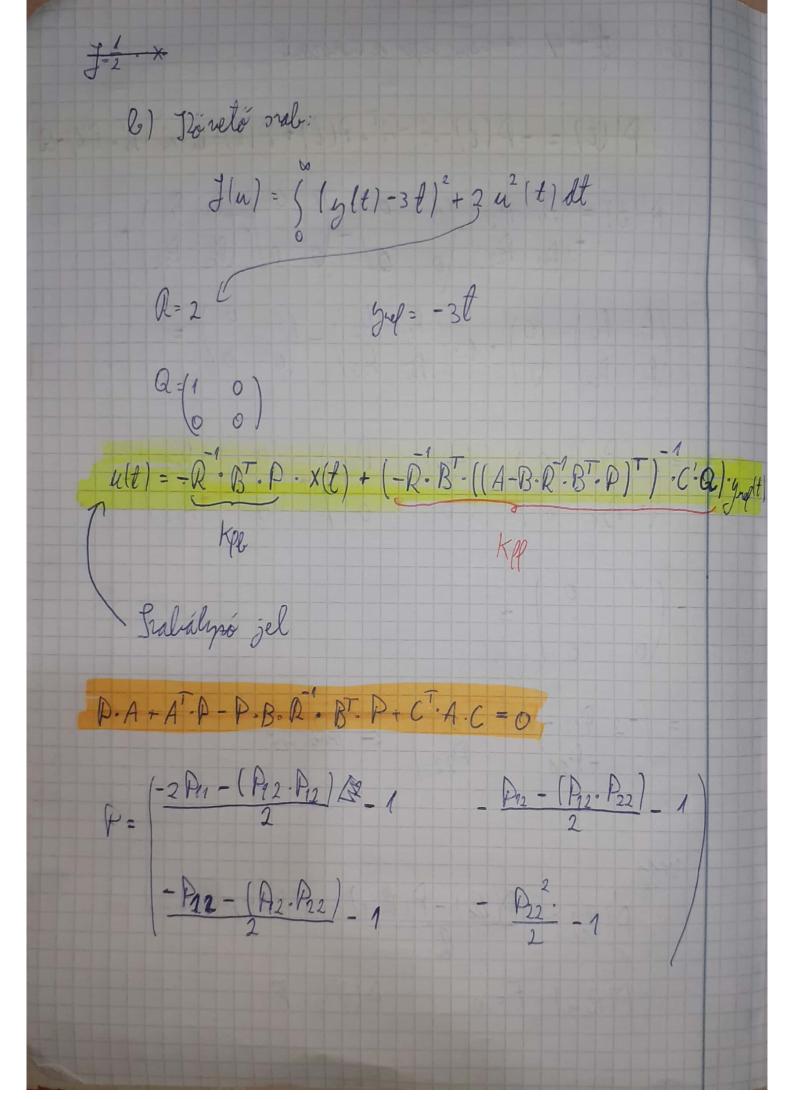


2 P11 - P11 · B22 + 1  P12 - P12 · P22	P12 - P12 · P22   -P22	$=\begin{pmatrix}0&0\\0&0\end{pmatrix}$
$\begin{cases} -P_{22}^{2} = 0 - = 0 \\ P_{12} - P_{12} \cdot P_{22} = 0 \\ 2P_{11} - P_{11} \cdot P_{22} + 1 = 0 \end{cases}$	=> P12 = 0	
$2P_{11} + 1 = 0$ $P_{11} = -\frac{1}{2}$	$P = \begin{pmatrix} -\frac{1}{2} \\ 0 \end{pmatrix}$	0)
u = 1.001.	0/	valari el von irua
u=	K	De a Mallab le revint is!

b) 
$$t = 4 = xem \text{ riger a horizont}$$

$$P'(t) = -P(t) \cdot A - A' \cdot P(t) + P(t) \cdot B \cdot R' \cdot B' \cdot P(t) - Q$$

$$P'(t) = \begin{pmatrix} P_{11} & P_{12} \\ P_{12} & P_{22} \end{pmatrix} \cdot \begin{pmatrix} A & O \\ O & O \end{pmatrix} \cdot \begin{pmatrix} P_{11} & P_{12} \\ P_{12} & P_{22} \end{pmatrix} + \begin{pmatrix} P_{11} & P_{12} \\ P_{12} & P_{22} \end{pmatrix} \cdot \begin{pmatrix} A_{11} & A_{22} \\ P_{12} & P_{22} \end{pmatrix} - \begin{pmatrix} A_{12} & O \\ O & O \end{pmatrix} = \begin{pmatrix} A_{12} & A_{12} \\ P_{21} & O \end{pmatrix} - \begin{pmatrix} A_{11} & P_{12} \\ O & O \end{pmatrix} + \begin{pmatrix} A_{12} & A_{12} \\ O & A_{12} \end{pmatrix} - \begin{pmatrix} A_{12} & A_{12}$$



$-P_{12} - (P_{12} - P_{22}) = 2$ $-P_{22} = 2$	1 1 1
P22 = V-2 => Valori rem jø	