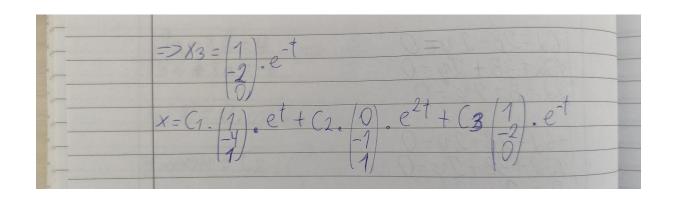


$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	INERCO -
$ \begin{array}{c c} -6\lambda - 2B - 2y = 0 \\ 10\lambda + 3B + 2y = 0 \\ B = -2\lambda - 2y \end{array} $	
$A_2 = 2$ $A_3 = -1$ $A = -1$	3 = 0
10 2 2 B = 0 10 5 2 2 1 11 y 0 2 1 4	2 = 0 B 0 0
	y=0 y=0 =0
$ \begin{array}{c cccccccccccccccccccccccccccccccccc$	=0
$h_{2} = \begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} y \\ y \end{pmatrix} = \begin{pmatrix} y \\ 1 \end{pmatrix}$ $3 \times 2 = \begin{pmatrix} y \\ 1 \end{pmatrix} \cdot e^{2t}$ $h_{3} = \begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} x \\ y$	
(3) (0)	



25) x=3x-6y+ 7 05331
ky-3x-3y
$(A-\lambda E) = \begin{pmatrix} 3-\lambda & -6 \\ 3 & -3-\lambda \end{pmatrix} = 0$
$= (3-\lambda)(3-\lambda)+18=0$
$-9 - 3\lambda + 3\lambda + \lambda^{2} = 0$ $\lambda^{2} - 9 - 0$
$\lambda^2 - 9 = 0$ $\lambda^2 = 9$ $\lambda_{1,2} = \pm 3$
17=3 [12=-3]
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$h_1 = (2) = (2) = (1) \cdot e^{3t}$ $h_2 = (2) = (0) \cdot e^{3t}$
$X_{XOM} = G_1(1) \cdot e^{3t} + C_2 \cdot (0) \cdot e^{-3t}$

 $|c| \cdot e^{3t} = 0$ $|c| \cdot e^{3t} = 1$ $|c| \cdot e^{3t} + 1$ $|c| \cdot e^{3t} = 1$ $|c| \cdot e^{3t} + 1$ $|c| \cdot e^{3t$

33.a)	$ \dot{x} = -2x - y + 37 \sin t \dot{y} = -4x - 5y $ $ (A - \lambda E) = (-2 - \lambda - 1) = 0 $ $ (4 - 6 - \lambda) = 0 $
	det = (-2-1)(-5-1)-4=0
	$10 + 2\lambda + 5\lambda + \lambda^{2} - 4 = 0$ $\lambda^{2} + 7\lambda + 6 = 0$ $D = 48 - 24 = 25 = 5^{2}$
	$\lambda_{1}, \lambda_{2} = -7 \pm 5 \times 10^{-4}$
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
1	$(B) = (-B) = (-1) \cdot e^{-t} = (2) = (2) = (4) \cdot e^{-6t}$ $y \times 0M = C_1 \cdot (-1) \cdot e^{-4} + C_2 \cdot (-1) \cdot e^{-6t}$

t1 = eint (+1) = (sint) => F = (0 cost + 37 sint) eot (0 cost + 0 sint) Leiß=i m+k=0=>n = (a cost + b sint). e ot (a cost + Bsint) = -2 (acost + Bsint)-(c cost + dsint) (c cost + edsint) = -4 (acos++Bsint)-5 (cost + dsint) -a sint + b cost = -2(a cost + b sint) - (0 cost + d sint) -c sint + d cost = -4 (a cost + b sint) - 5 (cost + d sint) 0=-2a-c a= 2b+d d=-4a+5c C= 4b+5d