

Assignment three (3)

- 1 - Command window
- 2 - Clear
- 3 - clc
- 4 - Close all
- 5 - Syms t
- 6 - $V = 110 \cdot \cos(120 \cdot \pi \cdot t)$
- 7 - $C = 100$
- 8 - $a = C \cdot V$
- 9 - $i = \text{diff}(a)$
- 10 - $P = i \cdot V$
- 11 - $t = 0 : 0.01 : 0.35$
- 12 - $V_n = \text{subs}(V)$
- 13 - $V_{nn} = \text{double}(V_n)$
- 14 - $I_n = \text{subs}(i)$
- 15 - $I_{nn} = \text{double}(I_n)$
- 16 - $P_n = \text{subs}(P)$
- 17 - $P_{nn} = \text{double}(P_n)$
- 18 - Plot (t, Vnn)
- 19 - Hold on
- 20 - Plot (t, Inn)
- 21 - Hold on
- 22 - Plot (t, Pnn)
- 23 - Legend ('voltage (v)', 'Current (a)', 'Power (w)')
- 24 - Grid on
- 25 - Grid minor

Assignment four (4)

- 1 - Command window
- 2 - Clear
- 3 - clc
- 4 - $A = [1, -2, -1, 3; 2, 3, 0, 1; 1, 0, 4, -2; 0, -1, 3, 1]$
- 5 - Eig(A)

The output is

$$\begin{matrix} 2.4323 + 2.2437i \\ 2.4323 - 2.2437i \\ -1.9323 + 1.7651i \\ -1.9323 - 1.7651i \end{matrix}$$

The eigenvalues is unstable because the values present here are



```

exercise.m x integration.m x caleb/MAT
1 - commandwindow
2 - clear
3 - clc
4 - a=[1,-2,-1,3;2,3,0,1;1,0,-4,-2;0,-1,3,1]
5 - eig(a)

```

Command Window

New to MATLAB? See resources for [Getting Started](#).

```

2.4323 + 2.2437i
2.4323 - 2.2437i
-1.9323 + 1.7651i
-1.9323 - 1.7651i

```