

MATLAB R2018a

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FILE NAVIGATE EDIT BREAKPOINTS RUN

C:\Program Files\MATLAB\R2018a\bin

Current Folder

Name

- win32
- win64
- deploytool.bat
- lcdata.xml
- lcdata.xsd
- lcdata_utf8.xml
- matlab.exe
- mbuild.bat
- mcc.bat
- mex.bat
- mex.pl
- mexext.bat
- mexsetup.pm
- mexutils.pm
- mw_mpiexec.bat
- worker.bat

Details

Workspace

Name	Value
C	100
I	1x1 sym
In	1x36 sym
P	1x1 symfun
Pn	1x1 symfun
t	1x1 sym
tn	1x36 double
V	1x1 symfun
Vn	1x1 symfun
vp	1x1 sym

Editor - C:\Users\personal\Desktop\New folder\hannah123.m

```
hannah123.m x Untitled.m x OTAOGHEHEAKA45.m x otaogheneakak44.m x +
1 - commandwindow
2 - clear
3 - close all
4 - syms t
5 - V(t)=110*cos(120*pi*t)
6 - C= 100
7 - vp= diff(V(t))
8 - I=C*vp
9 - P=V*I
10 - tn=[0:0.01:0.35]
11 - Vn=subs(V,tn)
12 - In=subs(I,tn)
13 - Pn=subs(P,tn)
14 - plot(tn,Vn,'b-',tn,In,'r-',tn,Pn,'k-')
15 - xlabel('time(sec)')
16 - ylabel('variable')
17 - grid on
18 - grid minor
19 - legend('voltage','current','power')
```

Command Window

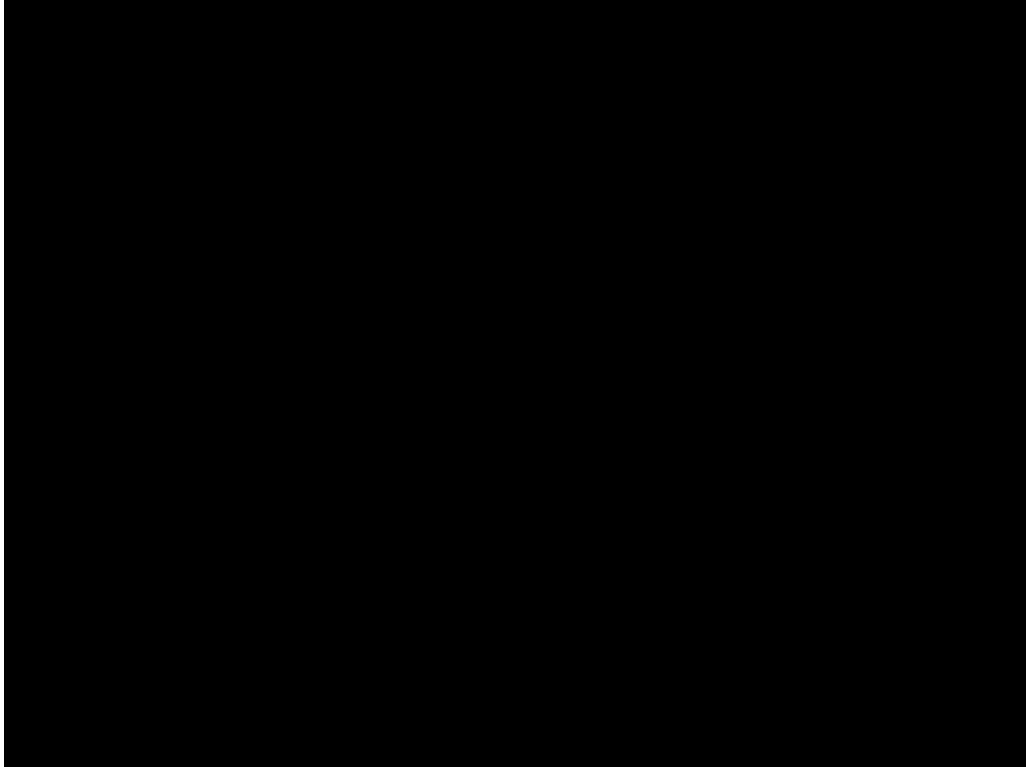
New to MATLAB? See resources for [Getting Started](#).

Pn(t) =

$$\left[0, -36300000 \cdot 2^{1/2} \cdot \pi \cdot (5^{1/2}/4 + 1/4) \cdot (5 - 5^{1/2})^{1/2}, -36300000 \cdot 2^{1/2} \cdot \pi \cdot (5^{1/2}/4 - 1/4) \cdot (5^{1/2} + 5)^{1/2} \right]$$

fx >>

MATLAB R2... Figure 1 File Explorer File Explorer File Explorer Mathcad Pr... Spotify 22:44



MATLAB R2019b

Figure 1

Legend: voltage, current, power

Command Window

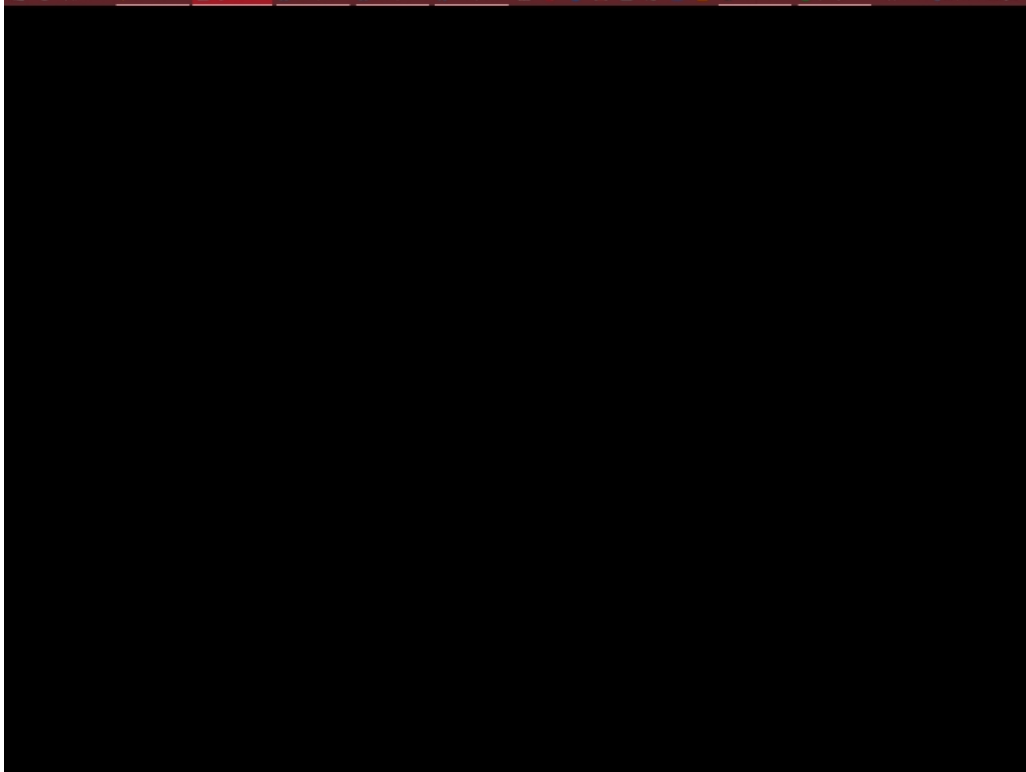
New to MATLAB? See resources for [Getting Started](#).

$$E_n(t) = [0, -363000000 \cdot 2^{(1/2)} \cdot t^{(1/2)} + 10^{(1/2)} / 4 + 1/4] \cdot (5 - 5^{(1/2)})^{(1/2)}, -363000000 \cdot 2^{(1/2)} \cdot t^{(1/2)} + 10^{(1/2)} / 4 - 1/4] \cdot (5^{(1/2)} + 5)^{(1/2)}$$

Workspaces

Name	Value
C	100
I	del sym
In	del sym
P	del sym
Ph	del sym
I	del sym
In	del sym
V	del sym
Vn	del sym
vp	del sym

Taskbar: MATLAB R2019b, Figure 1, File Explorer, File Explorer, File Explorer, Mathcad Pr..., Spotify, 22:45





Mathcad Professional - [Untitled:1]

File Edit View Insert Format Math Symbolics Window Help

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MEZE HANNAH CHIBUEZE
18/ENG05/031
MECHATRONICS ENGINEERING

QUESTION 4bi:

$$A := \begin{pmatrix} 1 & -2 & -1 & 3 \\ 2 & 3 & 0 & 1 \\ 1 & 0 & -4 & -2 \\ 0 & -1 & 3 & 1 \end{pmatrix}$$

$$B = \begin{pmatrix} T1 \\ T2 \\ T3 \\ T4 \end{pmatrix}$$

$$C := \begin{pmatrix} 10 \\ 8 \\ 3 \\ -7 \end{pmatrix}$$

+

$$B := A^{-1}C$$

$$B = \begin{pmatrix} -1 \\ 2 \\ -3 \\ 4 \end{pmatrix}$$



QUESTION 4d:

t := 0,0.1.. 10

t =

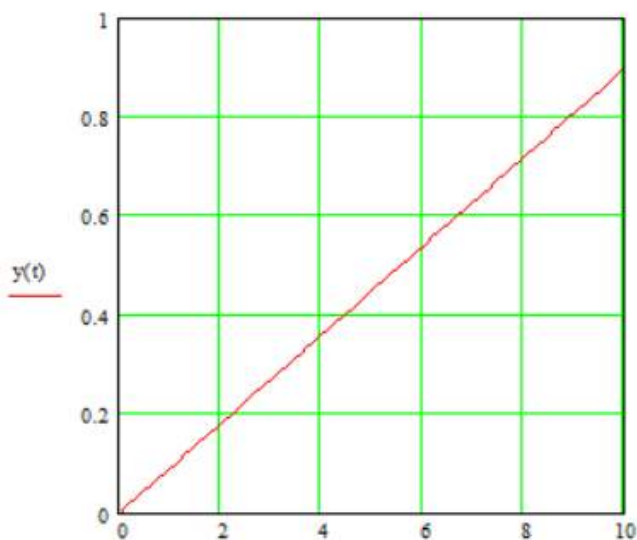
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
1.3
1.4
1.5

separately, a

$$y(t) := 2 \sin\left(\frac{\pi}{70}\right) t$$

y(t) =

0
$8.973 \cdot 10^{-3}$
0.018
0.027
0.036
0.045
0.054
0.063
0.072
0.081
0.09
0.099
0.108
0.117
0.126
0.135

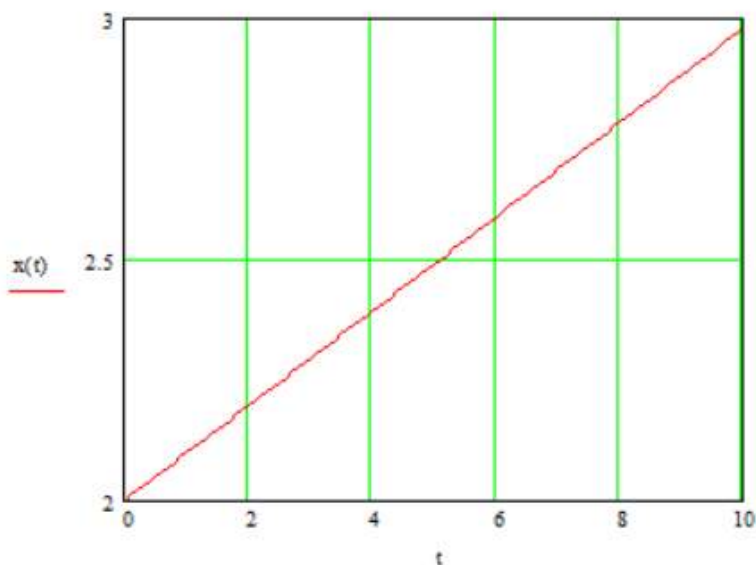


+

$$x(t) := 2 + 2t - 2 \cos\left(\frac{\pi}{10}\right) t$$

x(t) =

2
2.01
2.02
2.029
2.039
2.049
2.059
2.069
2.078
2.088
2.098
2.108
2.117
2.127
2.137
2.147



together .

