

File Edit Format Tools Symbolics Window Help

100%

Arial 10 B I U

Go

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

$$B = A^{-1} = \begin{pmatrix} 0.027 & 0.24 & 0.493 & 0.667 \\ -0.093 & 0.16 & -0.227 & -0.333 \\ -0.107 & 0.04 & 0.027 & 0.333 \\ 0.227 & 0.04 & -0.307 & -0.333 \end{pmatrix}$$

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

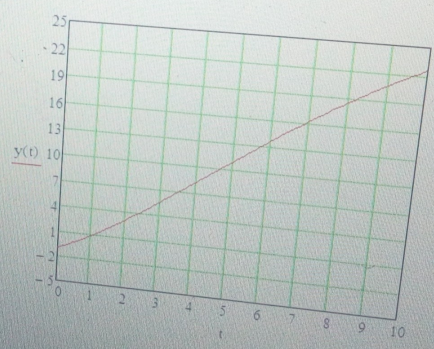
$$D = B \cdot C$$

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

$$t = 0.0:1.10 \quad y(t) = \sin(0.25 \cdot t) + (2 \cdot t) + e^{-0.85 \cdot t} - 2 \cdot \cos\left[\left(\frac{\pi}{10}\right) \cdot t\right]$$

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

y(t) =
-1
-0.856
-0.702
-0.541
-0.373
-0.197
-0.015
0.174
0.368
0.568
0.773
0.982
1.197
1.415
1.637



Graph

Graphing tools: zoom, pan, grid, axes, legend, data points, etc.

Press F1 for help

Windows taskbar icons: Start, Search, File Explorer, Edge, etc.

MATLAB R2018a

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FILE NAVIGATE EDIT BREAKPOINTS RUN

C:\Users\user

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- Apemakareem3.mlx
- Apemakareem2new.m

Details

Workspace

Name	Value
C	100000000
dV	1x1 symfun
I	1x1 symfun
In	1x1 symfun
P	1x1 symfun
Pn	1x1 symfun
t	1x1 sym
tn	1x36 double
V	1x1 symfun

Editor - C:\Users\user\Desktop\OKECHUKWUONE.m

```

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 - b=[10 ;8 ;3 ;:-7]
6 - c=inv(a)
7 - x=c*b

```

Command Window

Pn(t) =

$$[ 0, -3630000000000000*2^{(1/2)}*pi*(5^{(1/2)}/4 + 1/4)*(5 - 5^{(1/2)})^{(1/2)}, -3630000000000000*2^{(1/2)}*pi*(5^{(1/2)}/4 - 1/4)*(5^{(1/2)}/4 + 1/4)*(5 - 5^{(1/2)})^{(1/2)}, -3630000000000000*2^{(1/2)}*pi*(5^{(1/2)}/4 + 1/4)*(5 - 5^{(1/2)})^{(1/2)}, -3630000000000000*2^{(1/2)}*pi*(5^{(1/2)}/4 - 1/4)*(5 - 5^{(1/2)})^{(1/2)}]$$

>> em

Ln 6 Col 9

Search the web and Windows

11:50 PM 11/23/2019

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File: New, Open, Save, Compare, Go To, Print, Find

Text: Normal, Bold, Italic, Underline, Text Color, Background Color

Code: Run Section, Run and Advance, Section Break, Run to End

Run: Run, Step, Stop

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```

commandwindow
clear R T
clc
close all
    
```

Workspace

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Pn	1x1 symfun
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tn	1x36 double
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Command Window

Pn (t) =

$$[ 0, -3630000000000000*2^{1/2}*pi*(5^{1/2}/4 + 1/4)*(5 - 5^{1/2})^{1/2}, -3630000000000000*2^{1/2}*pi*(5^{1/2}/4 - 1/4)*(5^{1/2} - 5^{1/2})^{1/2} ]$$

>> em

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```
1 - commandwindow
2 - clear
3 - clc
4 - close all
5 - syms t
6 - V(t)=110*cos(120*pi*t)
7 - C=100.*(10.^6)
8 - dV=diff(V)
9 - I=C*dV
10 - P=V(t)*I
11 - tn=[0:0.01:0.35]
12 - Vn=subs(V,tn)
13 - In=subs(I,tn)
14 - Pn=subs(P,tn)
15 - plot(tn,Vn,tn,In,tn,Pn)
16 - xlabel('Time (secs)')
17 - ylabel('Variable')
18 - grid on
19 - grid minor
20 - legend('Voltage (V)', 'Current (A)', 'Power (W)')
```

Command Window

```
Pn(t) =
[ 0, -363000000000000*2^(1/2)*pi*(5^(1/2)/4 + 1/4)*(5 -
```

>> em

