

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

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

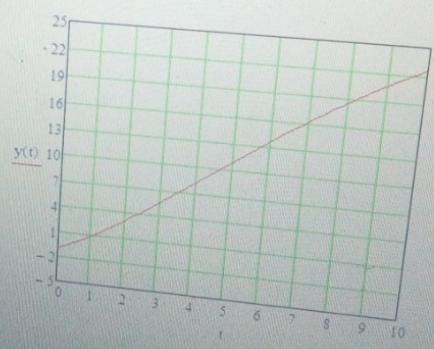
$$C_{inv} = \begin{pmatrix} 10 \\ 8 \\ 3 \\ -7 \end{pmatrix}$$

$$D = B \cdot C$$

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

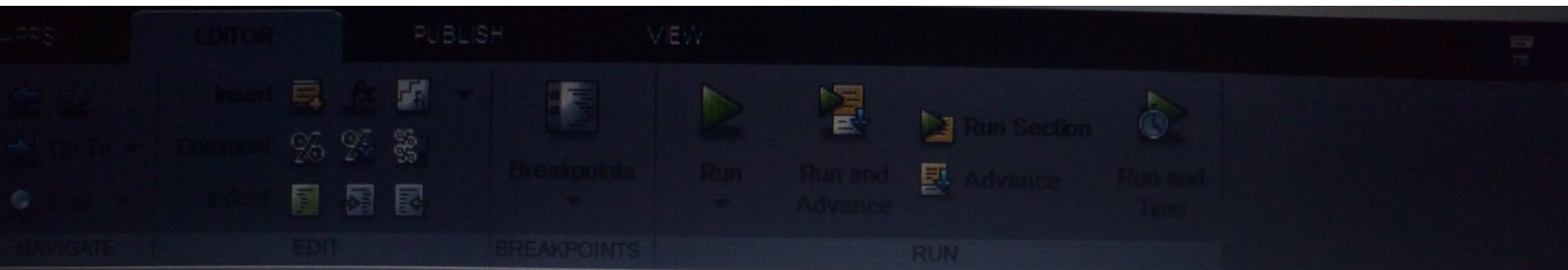
$$t = 0.01..10 \quad y(t) = \sin(0.25 \cdot t) + (2 \cdot t) + e^{-0.85 \cdot t} - 2 \cdot \cos\left[\left(\frac{\pi}{10}\right) \cdot t\right]$$

t =	y(t) =
0	-1
0.1	-0.856
0.2	-0.702
0.3	-0.541
0.4	-0.373
0.5	-0.197
0.6	-0.015
0.7	0.174
0.8	0.368
0.9	0.568
1	0.773
1.1	0.982
1.2	1.197
1.3	1.415
1.4	1.637



Graph

Graphing toolbar with icons for zoom, pan, and other functions.



Editor - C:\Users\user\IFIDITWO.m

IFIDIONE.m x IFIDITWO.m x IFIDITHREE.m x +

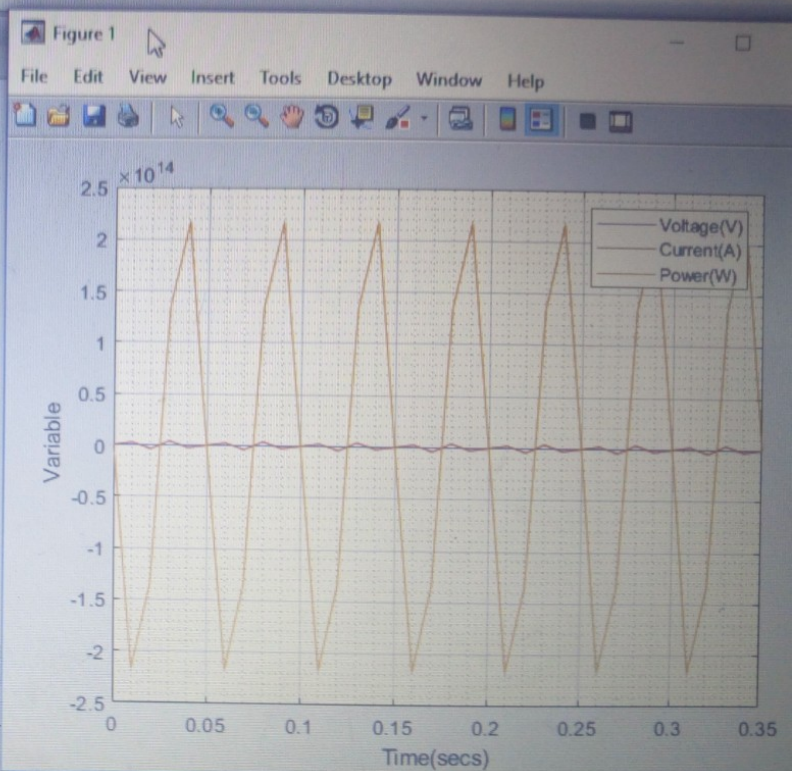
```
1 - commandwindow
2 - clear R T
3 - clc
4 - close all
```

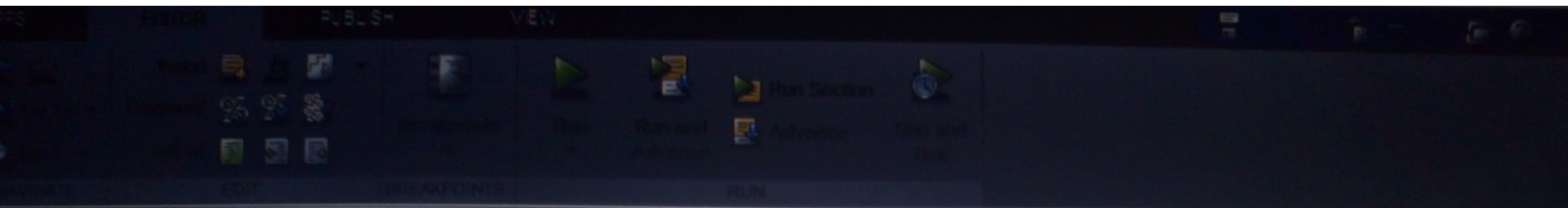
```
1 clear
2 clc
3 close all
4 syms t
5 V(t)=110*cos(120*pi*t)
6 C=100.*(10.^6)
7 dV=diff(V)
8 I=C*dV
9 P=V(t)*I
10 tn=[0:0.01:0.35]
11 Vn=subs(V,tn)
12 In=subs(I,tn)
13 Pn=subs(P,tn)
14 plot(tn,Vn,tn,In,tn,Pn)
15 xlabel('Time(secs)')
16 ylabel('Variable')
17 grid on
18 grid minor
19 legend('Voltage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

Command Window

[ 0, -363000000000000\*2^(1/2)\*pi\*(5^(1/2)/4 + 1/4)\*(5

f >>





```
Editor - C:\Users\user\IFIDIONE.m
IFIDIONE.m x IFIDITWO.m x IFIDITHREE.m x +
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

[ 0, -363000000000000\*2^(1/2)\*pi\*(5^(1/2)/4 + 1/4)\*(5 - 5^(1/2))^(1/2), -363000000000000\*2^(1/2)