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Workspace Editor - test.m\* Command Window

Name	Value
------	-------

```
fifthassignment.m test.m* test2.m test3.m +
1 - commandwindow
2 - clear
3 - clc
4 - close all
5 - format bank
6 - A=[0 10 4 -2;-3 -17 1 2;1 1 1 0;8 -34 16 -10]
7 - b=[-4;2;6;4]
8 - x=inv(A)*b
```

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Workspace Editor - test.m Command Window

Name	Value
A	4x4 double
b	[-4;2;6;4]
x	[4.0000;-9.7145e-17;2....]

```
A =  
      0      10.00      4.00      -2.00  
     -3.00     -17.00      1.00      2.00  
      1.00      1.00      1.00      0  
      8.00     -34.00     16.00     -10.00  
  
b =  
     -4.00  
      2.00  
      6.00  
      4.00  
  
x =  
      4.00  
     -0.00  
      2.00  
      6.00  
  
fx >> |
```

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Workspace

Name	Value
A	4x4 double
b	[-4;2;6;4]
x	[4.0000;-9.7145e-17;2....

Editor - test2.m

```
fifthassignment.m test.m test2.m test3.m +
1 - commandwindow
2 - clear
3 - clc
4 - close all
5 - syms t
6 - d=1.5*exp(-0.75*t)*sin(0.85*t)+(0.375*t)
7 - tn=[0;0.01;2.5]
8 - v=diff(d)
9 - vn=subs(v,tn)
10 - a=diff(v)
11 - an=subs(a,tn)
12 - figure(1)
13 - plot(tn,vn,tn,an)
14 - grid on
15 - grid minor
16 - axis tight
17 - xlabel('Time (min)')
18 - ylabel('Variable')
19 - legend('Velocity(km/min)', 'Acceleration(km/min^2)')
20
```

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Workspace

Name	Value
A	4x4 double
b	[-4;2;6;4]
x	[4.0000;-9.7145e-17;2....]

Editor - test2.m

Command Window

```

d =
(3*t)/8 + (3*sin((17*t)/20)*exp(-(3*t)/4))/2

tn =
    0
    0.01
    2.50

v =
(51*cos((17*t)/20)*exp(-(3*t)/4))/40 - (9*sin((17*t)/20)*exp(-(3*t)/4))/8 + 3/8

vn =
                                     33/20
(51*cos(17/2000)*exp(-3/400))/40 - (9*exp(-3/400)*sin(17/2000))/8 + 3/8
(51*cos(17/8)*exp(-15/8))/40 - (9*exp(-15/8)*sin(17/8))/8 + 3/8

a =
- (153*cos((17*t)/20)*exp(-(3*t)/4))/80 - (6*sin((17*t)/20)*exp(-(3*t)/4))/25

```

fx

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FILE VARIABLE CODE ENVIRONMENT RESOURCES

C:\Users\user\Documents

Workspace

Name	Value
A	4x4 double
b	[-4;2;6;4]
x	[4.0000;-9.7145e-17;2....]

Editor - test2.m

Command Window

```

tn =
    0
    0.01
    2.50

v =
(51*cos((17*t)/20)*exp(-(3*t)/4))/40 - (9*sin((17*t)/20)*exp(-(3*t)/4))/8 + 3/8

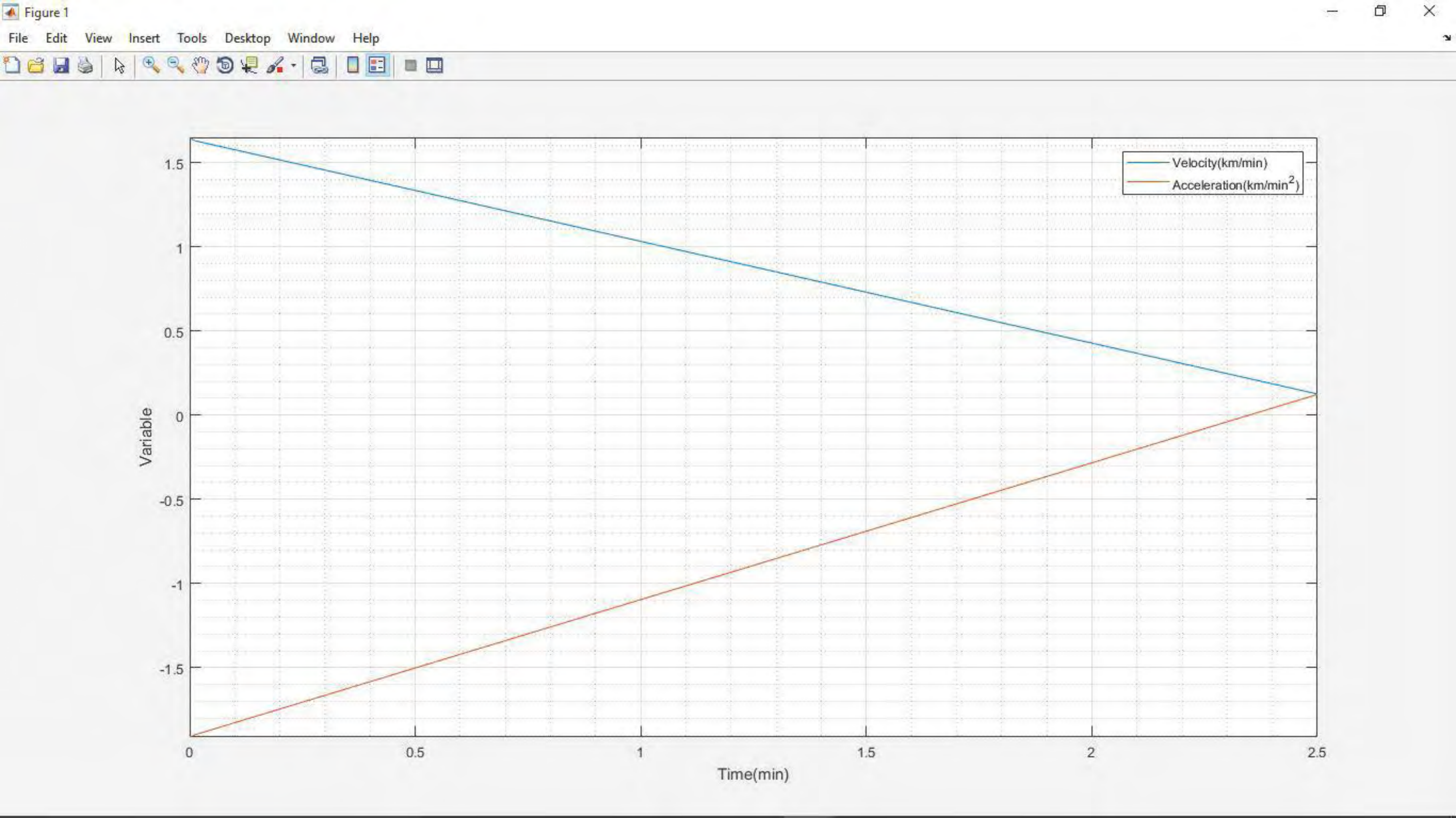
vn =
                                     33/20
(51*cos(17/2000)*exp(-3/400))/40 - (9*exp(-3/400)*sin(17/2000))/8 + 3/8
(51*cos(17/8)*exp(-15/8))/40 - (9*exp(-15/8)*sin(17/8))/8 + 3/8

a =
- (153*cos((17*t)/20)*exp(-(3*t)/4))/80 - (6*sin((17*t)/20)*exp(-(3*t)/4))/25

an =
                                     -153/80
- (153*cos(17/2000)*exp(-3/400))/80 - (6*exp(-3/400)*sin(17/2000))/25
- (153*cos(17/8)*exp(-15/8))/80 - (6*exp(-15/8)*sin(17/8))/25

```

fx



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Workspace

Name	Value
a	1x1 sym
an	3x1 sym
d	1x1 sym
t	1x1 sym
tn	[0;0.0100;2.5000]
v	1x1 sym
vn	3x1 sym

Editor - test3.m

fifthassignment.m test.m test2.m test3.m

```
1 - commandwindow
2 - clear
3 - clc
4 - format short g
5 - close all
6 - syms x
7 - a=vpa(pi)
8 - y=5*sin(5*x)^5
9 - v=a*(int(y^2,0,a))
10 - v=double(v)
```

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Workspace Editor - test3.m Command Window

Name	Value
a	1x1 sym
v	60.7212
x	1x1 sym
y	1x1 sym

```
a =  
  
3.1415926535897932384626433832795
```

```
y =  
  
5*sin(5*x)^5
```

```
v =  
  
60.721198952014608690095012987519
```

```
v =  
  
60.721
```

```
f_x >> |
```