

6_1

sample matrix (A)

8	1	6
3	5	7
4	9	2

a)

8	6	1
3	7	5
4	2	9

b)

8	6	1	0
3	7	5	0
4	2	9	0

c)

8	6	1	0
1	1	1	1
3	7	5	0
4	2	9	0

d)

8	1	0
1	1	1
3	5	0
4	9	0

6_2

P_{final} =

1.0000	0.4839	0.2258	0.0968	0.0323	0
0	0.0000	0	0.0000	0	0
0	0	0.0000	0	0.0000	0
0	0.0000	0	0.0000	0	0
0	0	0.0000	0	0.0000	0
0	0.5161	0.7742	0.9032	0.9677	1.0000

```

xfinal =

    1
    0
    0
    0
    0
    0

6_3
residual =
0
0
0

det(A) = -8

rcond(A) = 0.166666666666667
6_4
%when A=[1 5;1.5 7.501]
%and b= [17 25.503]

residual=
0
0
det(A) =9.999999999999176e-04
rcond(A) =8.887190369064820e-06

%when b=[17 25.501]

residual=

    1.0e-14 *

         0
    -0.355271367880050

%when b=[17 25.502]
residual =
0
0

%when b=[17 25.504]
residual =
0
0

6_6
%sample matrices a and b
a=[2 1 -1; -3 -1 2 -2 1 2];
b= [8 -11 -3];

x=
2
3
-1

```

1.

B:

7	-4	12
9	10	2
13	8	11
5	4	1

C:

-5	9	10	2
6	13	8	11
15	5	4	1

D:

7	-4	12
9	10	2

2.

length of $x = 3$

absolute value of $x = 2 \ 4 \ 7$

length of $y = 4$

absolute value of $y = 2 \ 4 \ 7 \ 6$

4.

(a)

	1st	2nd	3rd	4th
materials:	326000	346000	268000	364000
labor:	188000	190000	168000	214000
transportation:	177000	186000	160000	204000

(b)

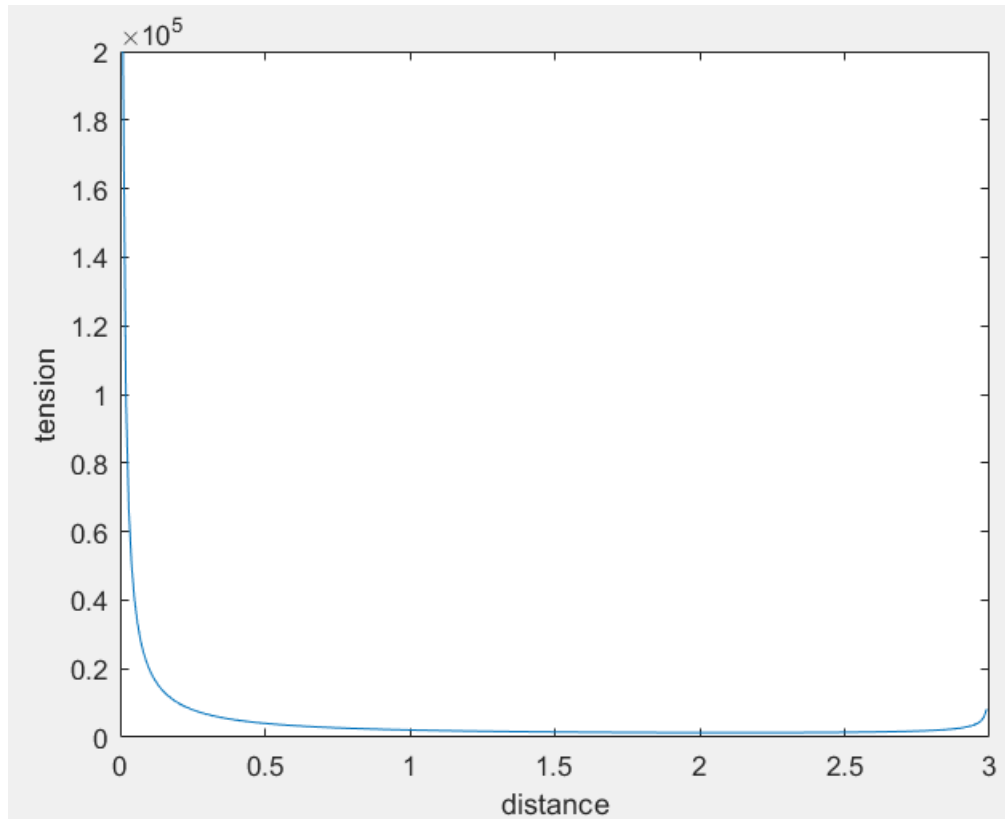
materials:	1304000
labor:	760000
transportation:	727000

(c)

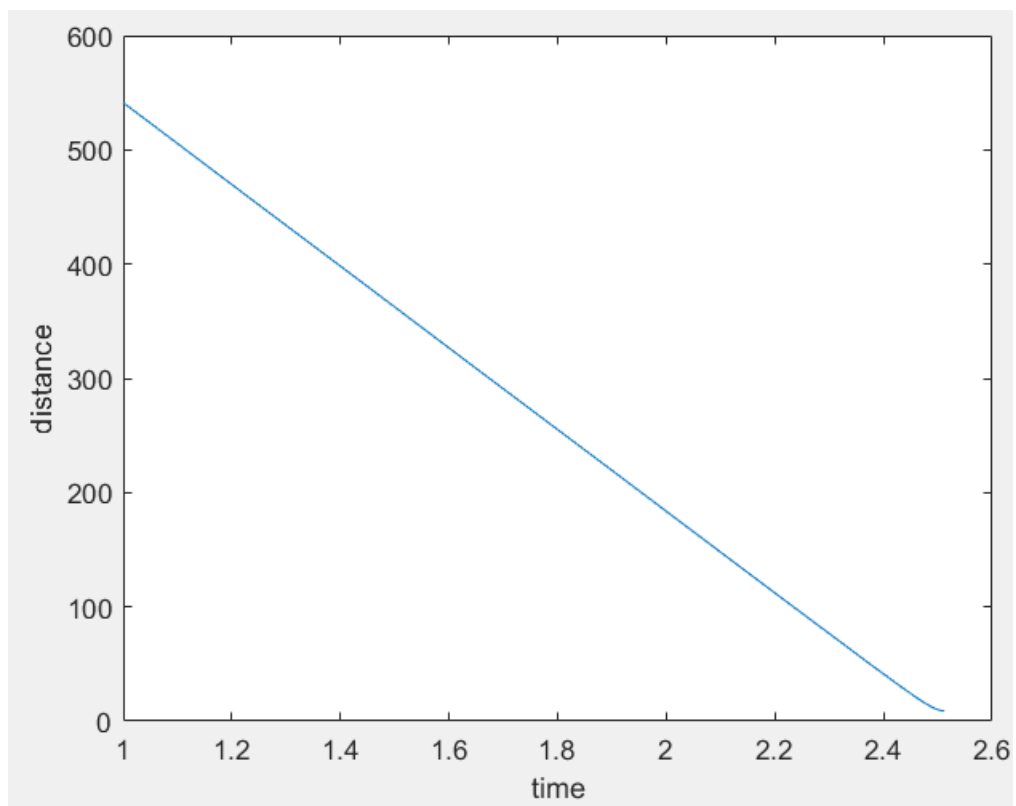
1st	2nd	3rd	4th
691000	722000	596000	782000

5.

Min = 2.1213



6.



Dmin=2.5125

7.

a1 =

-31	-13	-7
173	147	-25
117	57	112

a2 =

-31	-13	-7
173	147	-25
117	57	112

b1 =

209	347	-136
297	-111	308
1207	562	250

b2 =

209	347	-136
297	-111	308
1207	562	250