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MATRIC NO: 16/ENG03/039

DEPARTMENT: CIVIL ENGINEERING

COURSE CODE: ENG 281

ASSIGNMENT 4

1. clear and clc

2. COMANDS

```
commandwindow
```

```
clear
```

```
clc
```

```
A = [2,3,7,9,4;3,7,9,12,5;4,8,5,6,9;5,9,2,4,5;6,2,3,7,8]
```

```
colin = det(A)
```

```
coli = transpose(A)
```

```
col = inv(A)
```

```
co = rats(col)
```

OUTPUT

A =

2	3	7	9	4
3	7	9	12	5
4	8	5	6	9
5	9	2	4	5
6	2	3	7	8

colin =

-765.0000

coli =

2	3	4	5	6
3	7	8	9	2
7	9	5	2	3
9	12	6	4	7
4	5	9	5	8

col =

1.8915	-1.4026	-0.3124	0.7843	-0.2078
-0.4379	0.3268	0.0523	-0.0392	-0.0196
2.5725	-1.8392	-0.0863	0.7647	-0.5176
-1.8876	1.4654	0.0105	-0.6078	0.3961
-0.6222	0.3778	0.2444	-0.3333	0.1333

co =

5×70 char array

'	401/212	-108/77	-239/765	40/51
-53/255	'			
'	-67/153	50/153	8/153	-2/51
-1/51	'			
'	656/255	-469/255	-22/255	13/17
-44/85	'			
'	-319/169	148/101	3/287	-31/51
101/255	'			
'	-28/45	17/45	11/45	-1/3
2/15	'			

>>

3. COMMAND

```
commandwindow
clear
clc
A = [0,10,4,-2;-3,-17,1,2;1,1,1,0;8,-34,16,-10]
B = [-4;2;6;4]
S = inv(A)
X = S * B
```

OUTPUT

A =

0	10	4	-2
-3	-17	1	2
1	1	1	0
8	-34	16	-10

B =

-4
2
6
4

S =

-0.1786	-0.1020	0.5714	0.0153
0.0357	-0.0153	0.0357	-0.0102
0.1429	0.1173	0.3929	-0.0051
-0.0357	0.1582	0.9643	-0.0612

X =

4.0000
-0.0000
2.0000
6.0000

>>