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COURSE: ENG 281

DEPT: CHEMICAL ENGINEERING

MATRIC NO: 16/ENG01/010

1. Command used to clear variables from the workspace and command window:

```
commandwindow
```

```
clear
```

```
clc
```

QUESTION 2

```
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];
```

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

i. 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];
```

```
ore = det(A)
```

```
ore =
```

```
-765.0000
```

```
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];
```

```
gift = transpose(A)
```

```
gift =
```

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

```

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];
ugo = inv(A)
ugo =

```

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

```

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];
somto = rats(ugo)
somto =

```

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

QUESTION 3

```

commandwindow
clear
clc
C = [0 10 4 -2; -3 -17 1 2; 1 1 1 0; 8 -34 16 -10];
D = [-4; 2; 6; 4];
folake = inv(C)
folake =

```

-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

```

commandwindow
clear
clc
C = [0 10 4 -2; -3 -17 1 2; 1 1 1 0; 8 -34 16 -10];
D = [-4; 2; 6; 4];
folake = inv(C)
X = folake * D
X =

```

4.0000
-0.0000
2.0000
6.0000

