

MAC-ETELI GOLDEN

MECHATRONICS

16/ENG05/021

Q1

```
commandwindow
clear
clc
```

Q2

```
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];
D = det(A)
T = A'
I = inv(A)
format rat
I
```

```
I =
     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

I =
    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

I =
    1447/765   -1073/765   -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
   -1444/765   1121/765     8/765   -31/51   101/255
    -28/45     17/45     11/45    -1/3     2/15
```

Ac
Go

Q3

```
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];  
C = inv(A);  
S = B * C
```

```
S =
```

```
     4  
    -1/10293942005418276  
     2  
     6
```

```
f1 >>
```

Activar
Go to PC