**EJEH OCHIGBO EMMANUEL**

**16/ENG05/017**

**MECHATRONICS ENGINEERING**

**ENGINEERING MATHEMATICS**

**ENG 281**

**ASSIGNMENT 4**

1. Commandwindow

Clear

Clc

1. COMMANDS

 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]

DETERMINANT=det(A)

TRANSPOSE=transpose(A)

INVERSE=A^-1

format rat

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

DETERMINANT =

 -765

TRANSPOSE =

 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

INVERSE =

 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

1. COMMANDS

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]

 X=A^-1\*B

OUTPUT

A =

 0 10 4 -2

 -3 -17 1 2

 1 1 1 0

 8 -34 16 -10

B =

 -4

 2

 6

 4

X =

 4

 -1/10293942005418276

 2

 6