MATH 260
MATLAB EXERCISE II

Commands (II)

1. **3-Row Vector:** r = [a,b,c] ***2.*** **4-Column Vector:** c = [d;e;f;g]
3. **2x3 Matrix: A=** [a,b,c**;**d,e,f] ***4.*** **Sum of 2 matrices:** A+B
5. **Product of 2 matrices:** A*B ***6.*** **Transpose of** A= A**'**
7. **nxn identity matrix =** eye(n) ***8.*** **Identity matrix of the size of square matrix A =** eye(size(A))
9. **Trace of A =** trace(A) ***10.*** **Determinant of A =** det(A)
11. **Inverse of A =** inv(A) ***12.*** **mxn matrix of *all entries 1*=** *ones(m,n)*
13. Matrix of all 1's of size A = *ones(size(A))*

Let $A=\begin{bmatrix} 2 & -1 & 3 \\ 5 & 6 & 8 \\ x & 0 & 7 \\ 1 & 2 & 3 \\ 9 & 3 & y \end{bmatrix}$, $B=\begin{bmatrix} 1/2 & 7 & 3 \\ -2 & 8 & 8 \\ 2/5 & 6 & 6 \\ 2 & 5 & 4 \\ 1 & x & 1 \end{bmatrix}$, $C=\begin{bmatrix} 11 & 2 & 4 & 8 & 8 \\ 2 & 6 & 1 & 1/5 & 5 \\ x & 0 & 4 & 8 & 7 \end{bmatrix}$, where

x = the 4th digit in your ID# and y = the 5th digit in your ID#.

Exercises: Using **MATLAB command** find the following (whenever it is possible)

1. $A+B$
2. AC, CA
3. Determinant of CB
4. Transpose of A
5. Inverse of AC
6. $(AC+CB)^T+I_5$