

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. $n \times n$ identity matrix = $\text{eye}(n)$
8. Identity matrix of the size of square matrix $A = \text{eye}(\text{size}(A))$
9. Trace of $A = \text{trace}(A)$
10. Determinant of $A = \det(A)$
11. Inverse of $A = \text{inv}(A)$
12. $m \times n$ matrix of all entries 1 = $\text{ones}(m,n)$
13. Matrix of all 1's of size $A = \text{ones}(\text{size}(A))$

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

$x =$ 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. $(AC+CB)^T + I_5$