

## MATLAB Sample Lab:

### Exercises:

1. (a) enter the matrix  $A = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$

(b) Evaluate  $A^2$  and  $A.^2$ . Explain the difference between the two outputs.

2. (a) Create a row vector  $x$  with integer entries from 2 to 5

(b) Change the vector into a column vector.

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### SAMPLE LAB WRITE UP:

#### MAT 343 MATLAB LAB 1

NAME: \_\_\_\_\_

1.

a)  $A = [1, 2, 3; 4, 5, 6; 7, 8, 9]$

A =

1	2	3
4	5	6
7	8	9

b)  $A^2, A.^2$

ans =

30	36	42
66	81	96
102	126	150

ans =

1	4	9
16	25	36
49	64	81

$A^2$ : performs the regular matrix-matrix multiplication  $A * A$

$A.^2$ : every entry of  $A$  is squared

2.

a)  $>> x = 2:5$

x =

2	3	4	5
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b)  $>> x = x'$

x =

2
3
4
5