

1) Start MATLAB.

Type `x = -1:0.2:1` to create an x-axis vector. Then execute the following statements and examine:

`sqrt(x)`

`sin(x)`

`x.^2`

2) Examine what happens when you execute the following statements:

`x = [1 2 3 4]`

`y = -2:2:4`

`x.^y`

`x.*y`

`x./y`

`x*y`

`x'*y`

`x*y'`

What is the difference between “.” and “*” operation?

3) Type the following lines into MATLAB command window. Then use the command “size” to see the dimension of each matrix.

`B=[2;4;6;8]`

`C=[5 3 5;6 2 -3]`

`E=[3 5 10; 0 0 ...`

`3;3 9 8]`

`T=[4 24 9]`

`Q=[T 0 T]`

`V=[C(2,1);B]`

`A(2,1)=-3`

4) Make a matrix by typing `M = randn(5)` and examine

`M(:,3)`

`M(1:2,4)`

`M(3,:)`

`M(3,4)`

`M(4,3:4)`

`diag(M)`

`sum(M)`