

# Matlab Lesson #1.

## 1. Getting started.

```
help
help 'topic', e.g.,
help taylor
```

## 2. The semicolon suppresses the output.

## 3. Plot functions. - the user decides how many grid points are used.

```
y = 0:.01:1;
% define a vector from 0 to 1, with increment .01
plot(y, sin(3*y))
% plot the function sin(3y) with the grid points defined above
```

## 4. For simple function, you can use 'inline' to define an inline function of your own

```
syms x;
g = inline('sin(x)/x')
```

## 5. Please use .\*, ./, .^ when the operation is on a vector, and operate 'term by term'

## 6. The matlab can find taylor polynomial for you

```
help taylor
syms x;
taylor(exp(x))
taylor(exp(x), 'order', 9)
taylor(exp(x)/cos(x))
f = inline(ans)
z = .01:.01:1;
plot(z, exp(z)./cos(z), z, f(z))
```