

Lecture 1: Basic MATLAB notation

```
% this is a comment
```

```
% Assigning values to variables
```

```
a = 4
```

```
b = 5
```

```
% Capitalization matters. A is not equal to a
```

```
A = 3
```

```
a
```

```
% Simple calculations
```

```
format short
```

```
a/b
```

```
ans
```

```
y = ans
```

```
format long
```

```
y
```

```
(3^8)*4*9
```

```
% Multiple commands on one line
a = 4, b = 5
a = 4 b = 5 % this command just doesn't work!

% To suppressing display of output use ;
x = 2; y = x^2

% Elementary functions
sqrt(2)
exp(1)
log(ans)
rand
y = cos(1)
pi
cos(pi)
sin(pi)
sqrt(-1)
exp(pi*sqrt(-1))
abs(ans)
help elfun
```

```
% Other functions in MATLAB
```

```
gamma(7)
```

```
airy(8)
```

```
besselj(0,1)
```

```
help erf
```

```
eps
```

```
a=4/3 ; b=a-1 ; c = 1-(3*b)
```

```
% What happens here?
```

```
a=1 ; b=4 ; c=a/a+b
```

```
a=1 ; b=4 ; c=a/(a+b)
```

```
a = 10400
```

```
a = 10-400
```

```
0/0
```

```
% Information
```

```
who % Lists current variables in work space
```

```
whos % Lists current variables, long form.
```

```
help clear
```

```
clear all
```

```
who
```

```
% For more info and demos
help
help eig
helpwin eig
doc eig
help demos
demo
truss
xpsound
```

<http://www.mathworks.com/access/helpdesk/help/techdoc/matlab.html>