Assignment 1

**Exercise 1.0**

1. My MATLAB quiz will be held on Tuesday, June 4th, 2013.
2. My MATLAB quiz is at 9:00 AM.
3. My quiz will be held in AP&M B432.
4. Registration for an alternative time closes on Friday of 9th week. If you miss the deadline, you will not be able to sign up for an alternative time.
5. If you miss the quiz for a non-emergency situation, you will not be able to make it up.
6. Diana Ho

**Exercise 1.1**

*Command:*

>> a=1; d=4; i=9; n=14; h=8; o=15;

>> dianaho = d+i+a+n+a+h+o

*Output:*

dianaho =

52

**Exercise 1.2**

*Command:*

>> z = 25-(100-7\*exp(5+cos(pi/3)))

*Output:*

z =

1.6378e+03

**Exercise 1.3**

*Command:*

>> Fibonacci=[1 1 2 3;5 8 13 21;34 55 89 144;233 377 610 987]

*Output:*

Fibonacci =

1 1 2 3

5 8 13 21

34 55 89 144

233 377 610 987

**Exercise 1.4**

*Command:*

>> donut=Fibonacci(3:4,2:3)

*Output:*

donut =

55 89

377 610

**Exercise 1.5**

*Command:*

>> A=rand(4)

A =

0.1712 0.0462 0.3171 0.3816

0.7060 0.0971 0.9502 0.7655

0.0318 0.8235 0.0344 0.7952

0.2769 0.6948 0.4387 0.1869

>> B=rand(4)

B =

0.4898 0.7547 0.1626 0.3404

0.4456 0.2760 0.1190 0.5853

0.6463 0.6797 0.4984 0.2238

0.7094 0.6551 0.9597 0.7513

*Output:*

>> A+B

ans =

0.6610 0.8009 0.4797 0.7219

1.1516 0.3732 1.0692 1.3508

0.6781 1.5032 0.5328 1.0190

0.9863 1.3499 1.3985 0.9381

>> B+A

ans =

0.6610 0.8009 0.4797 0.7219

1.1516 0.3732 1.0692 1.3508

0.6781 1.5032 0.5328 1.0190

0.9863 1.3499 1.3985 0.9381

In theory, the matrices should be equal, and they are.

**Exercise 1.6**

*Command:*

>> syms s t

*Output:*

>> diff(log(cos(t)-3\*s), 's')

ans =

3/(3\*s - cos(t))

>> diff(log(cos(t)-3\*s), 't')

ans =

sin(t)/(3\*s - cos(t))

**Exercise 1.7**

*Command:*

>> help sin

sin Sine of argument in radians.

sin(X) is the sine of the elements of X.

See also asin, sind.

Overloaded methods:

sym/sin

codistributed/sin

Reference page in Help browser

doc sin

asin Inverse sine, result in radians.

asin(X) is the arcsine of the elements of X. Complex

results are obtained if ABS(x) > 1.0 for some element.

See also sin, asind.

Overloaded methods:

sym/asin

codistributed/asin

Reference page in Help browser

doc asin

*Output:*

>> asin(1)

ans =

1.5708