

연산자

```
>> 1+3

ans =

     4

>> 13-4

ans =

     9

>> 12*3

ans =

    36

>> 36/3

ans =

    12
```

관계연산자

```
>> x = [1 2 3 4 5]; y = [5 4 3 2 1];
>> x < y

ans =

1×5 logical 배열

     1     1     0     0     0

>> x <= y

ans =

1×5 logical 배열

     1     1     1     0     0

>> x == y

ans =

1×5 logical 배열

     0     0     1     0     0

>> x >= y

ans =

1×5 logical 배열

     0     0     1     1     1

>> x > y

ans =

1×5 logical 배열

     0     0     0     1     1
```

For 문

```

>> for x=0:2:10
a=2^x
end

a =

    1

a =

    4

a =

   16

a =

   64

a =

  256

a =

 1024

```

If else 문

```

>> if a<1
b=a+1
else
c=a+2
end

c =

    5

```

While 문

```

>> while a<4
a=a+1
end

a =

    2

a =

    3

a =

    4

```

세미콜론 ;

```
>> a=1; b=2, c=3;
```

```
b =
```

```
2
```

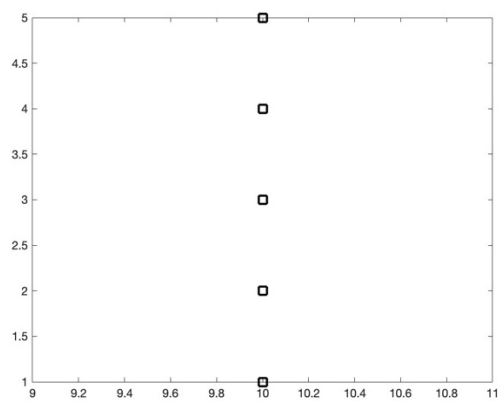
```
>> b=2
```

```
b =
```

```
2
```

명령문 연속 ...

```
>> plot(x,y, '--rs', 'LineWidth', 2, 'MarkerEdgeColor', 'k', ...  
'MarkerSize', 10)
```



Inline

```
>> f = inline('x^3+6*x-2', 'x');  
>> f(3)
```

```
ans =
```

```
43
```

```
>> f = inline('x.^3+6*x-2', 'x');  
>> f([3 4 5])
```

```
ans =
```

```
43    86   153
```

Linspace

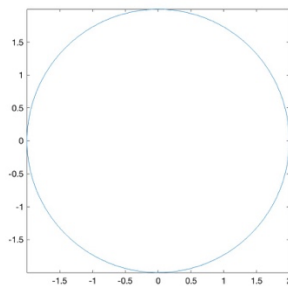
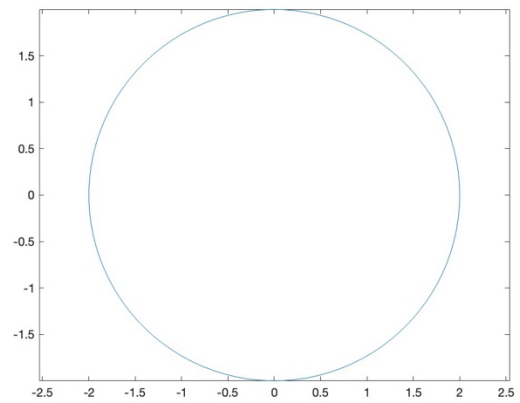
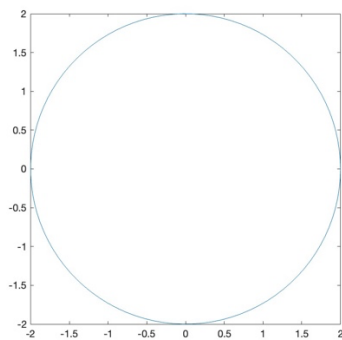
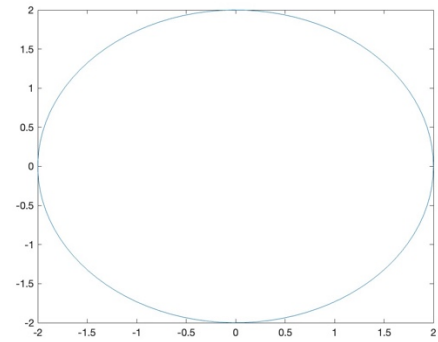
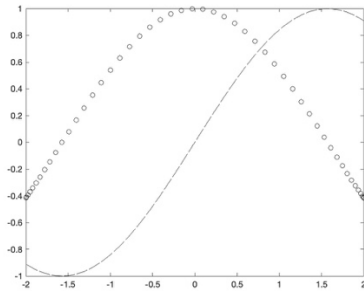
```
>> x = linspace(0,5,6)
```

```
x =
```

```
0    1    2    3    4    5
```

Plot

```
>> plot(x,sin(x),'k--',x,cos(x),'ko')
>> t=linspace(0,2*pi,100); x=2*cos(t); y=2*sin(t);
>> plot(x,y)
>> t=linspace(0,2*pi,100); x=2*cos(t); y=2*sin(t);
>> plot(x,y); axis square;
>> t=linspace(0,2*pi,100); x=2*cos(t); y=2*sin(t);
>> plot(x,y); axis equal
>> t=linspace(0,2*pi,100); x=2*cos(t); y=2*sin(t);
>> plot(x,y); axis image;
```



Ones

```
>> ones(3)
```

ans =

```

1     1     1
1     1     1
1     1     1
```

Zeros

```
>> zeros(2)
```

```
ans =
```

```
    0    0
    0    0
```

Length

```
>> C=[1 2 3]; length(C)
```

```
ans =
```

```
3
```

Sum

```
>> A=[1 2 3; 4 5 6; 7 8 9];
>> sum(A)
```

```
ans =
```

```
12    15    18
```

Abs

```
>> abs(-3)
```

```
ans =
```

```
3
```

fprintf

```
>> fp = fopen('test.m', 'w')
```

```
fp =
```

```
3
```

```
>> fprintf(fp, '%d %d\n', 1, 2);|
>> fprintf(fp, '%f %f\n', 3.5, 4.5);
>> fprintf(fp, '%e %e\n', 100, 1000);
>> fclose(fp);
```

Load

```
>> a = load('test.m');  
>> a
```

```
a =
```

```
1.0e+03 *  
    0.0010    0.0020  
    0.0035    0.0045  
    0.1000    1.0000
```

Rand()

```
>> Random_matrix = rand(2,3)
```

```
Random_matrix =
```

```
    0.8147    0.1270    0.6324  
    0.9058    0.9134    0.0975
```

```
>> rand('seed',3)
```

```
>> rand(2,3)
```

```
ans =
```

```
    0.5387    0.0512    0.3010  
    0.3815    0.2851    0.1277
```