영상처리 과제 1주차 18011767 이규훈

1번

```
>> 235 * 645

ans =

      151575

>> 12.45/ 17.56

ans =

    0.7090

>> sin(pi/6)

ans =

    0.5000

>> sqrt(2)

ans =

    1.4142

>> exp(0.5)

ans =

    1.6487
```

```
>> 132 +45

ans =

   177
```

4번

```
>> a = 123456

a =

       123456

>> b= 3^(0.25)

b =

    1.3161

>> c = cos(pi/8)

c =

    0.9239

>> (a+b)/c

ans =

   1.3363e+05
```

```
>> 2*a-3*b

ans =

   2.4691e+05

>> c^2 - sqrt(a-b)

ans =

 -350.5076

>> a / (3*b+4*c)

ans =

   1.6151e+04

>> exp(a^(0.25) - b^10)

ans =

   23.4818
```

6번

```
>> [1:15].^3

ans =

  1 ~ 4번 열

          1           8          27          64

  5 ~ 8번 열

        125         216         343         512

  9 ~ 12번 열

        729        1000        1331        1728

  13 ~ 15번 열

       2197        2744        3375
```

```
>> n=1:10
sin(n*pi/10)

n =

  1 ~ 9번 열

     1      2      3      4      5      6      7      8      9

  10번 열

    10


ans =

  1 ~ 5번 열

    0.3090    0.5878    0.8090    0.9511    1.0000

  6 ~ 10번 열

    0.9511    0.8090    0.5878    0.3090    0.0000
```

```
>> n= 10:20

n =

  1 ~ 9번 열

    10    11    12    13    14    15    16    17    18

  10 ~ 11번 열

    19    20

>> sqrt(n)

ans =

  1 ~ 5번 열

    3.1623    3.3166    3.4641    3.6056    3.7417

  6 ~ 10번 열

    3.8730    4.0000    4.1231    4.2426    4.3589

  11번 열

    4.4721
```

7번

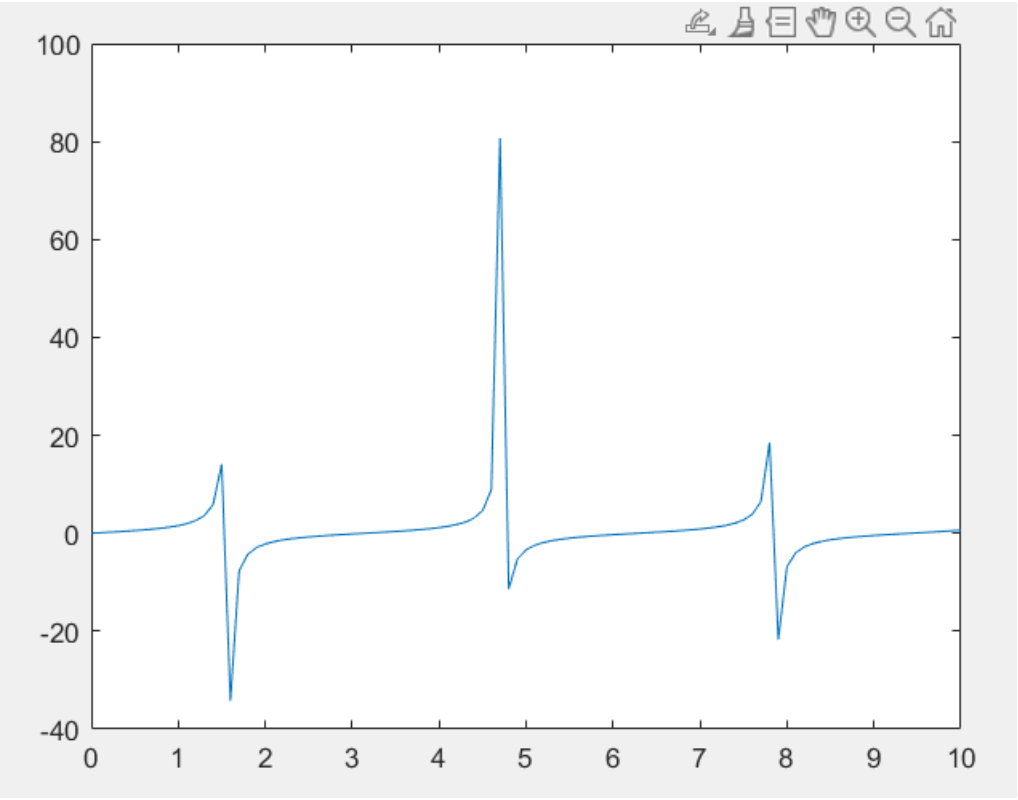
```
>> homework_week1_number7

A =

     1     2     3
     2     3     4
     3     4     5


B =

    -1     2    -1
    -3    -4     5
     2     3    -4


C =

     0    -2     1
    -3     5     2
     1     1    -7
```

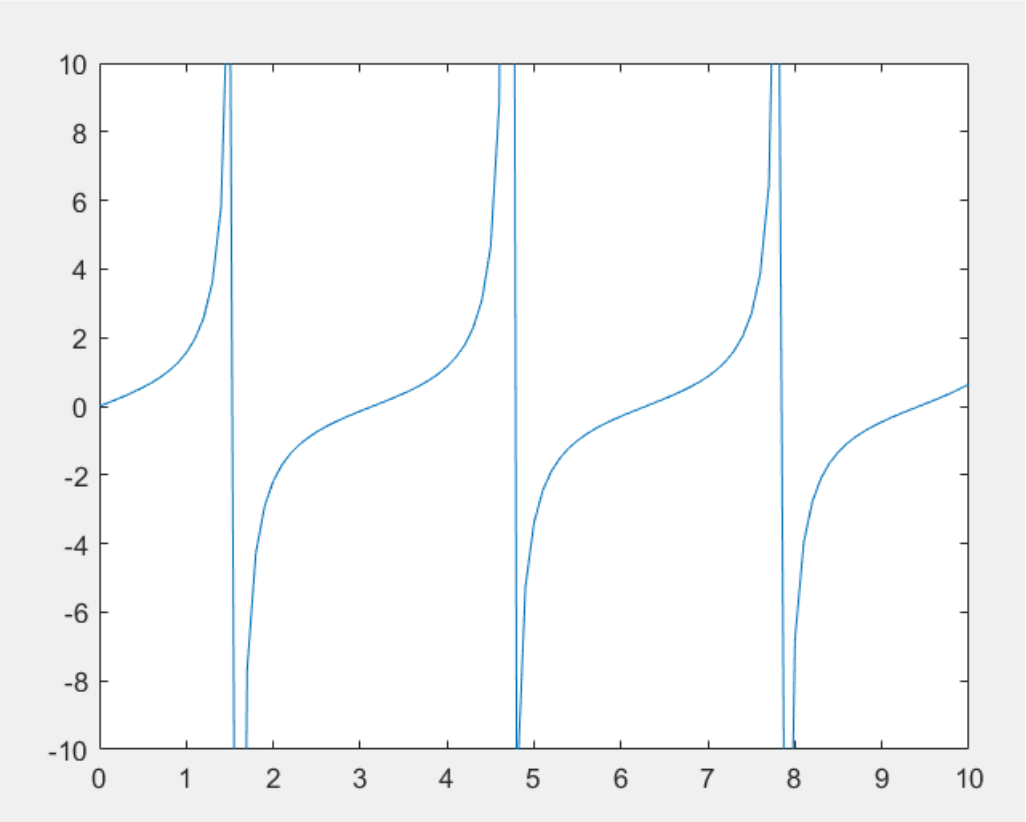
```
2*A - 3*B

ans =

     5    -2     9
    13    18    -7
     0    -1    22

A^7

ans =

     1133568     1647000     2160432
     1647000     2392983     3138966
     2160432     3138966     4117500

A*B - B*A

ans =

    -1     3    -3
    -7     2    -3
    -1     8    -1
```

```
B*C'

ans =

    -5    11     8
    13    -1   -42
   -10     1    33

(A*B)'

ans =

    -1    -3    -5
     3     4     5
    -3    -3    -3
```

```
B' * A'

ans =

    -1    -3    -5
     3     4     5
    -3    -3    -3

A^2 + B^3

ans =

    90   103   -92
  -154  -132   286
   163   167  -147
```

11번


100
80
60
40
20
0
-20
-40
0 1 2 3 4 5 6 7 8 9 10


10
8
6
4
2
0
-2
-4
-6
-8
-10
0 1 2 3 4 5 6 7 8 9 10

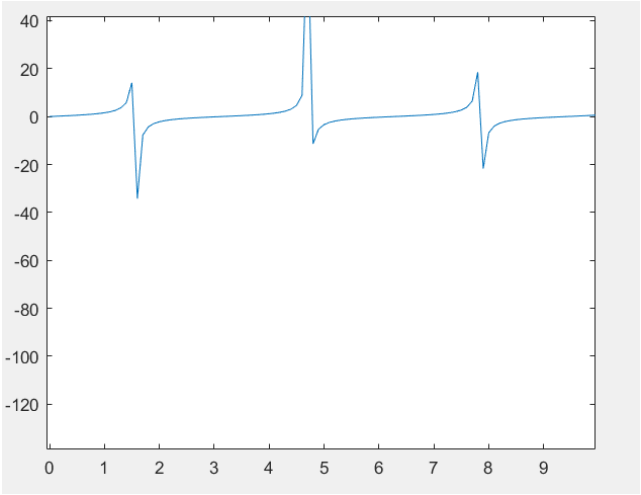
axis function is consisted of

axis[start of x, end of x, start of y, end of y]

assign the range of x, y -> X, Y축 범위 지정

axis 함수는 x,y축의 범위를 지정하는 함수이다.

ex 1) axis([0,10,-10,10]) -> axis([0,10,100,10])



Ex 2) axis([0,10,-10,10]) -> axis([0,10,-10,100])