

Arithmetic:

```
round(4.65/4,4)
```

```
ans = 1.1625
```

```
floor(-4.67)
```

```
ans = -5
```

```
ceil(8.67)
```

```
ans = 9
```

```
fix(3.87)
```

```
ans = 3
```

```
fix(-8.63)
```

```
ans = -8
```

```
mod(9,2)
```

```
ans = 1
```

Complex:

```
z=7+4i
```

```
z = 7.0000 + 4.0000i
```

```
a=abs(z)
```

```
a = 8.0623
```

```
theta=angle(z)
```

```
theta = 0.5191
```

```
theta=(180/pi)*angle(z)
```

```
theta = 29.7449
```

```
zconj=a*exp(-i*theta)
```

```
zconj = -0.8069 + 8.0218i
```

```
c=3+8i
```

```
c = 3.0000 + 8.0000i
```

```
x=real(c)
```

```
x = 3
```

```
y=imag(c)
```

y = 8

angc=angle(c)

angc = 1.2120

absc=abs(c)

absc = 8.5440

Z1=5+8i

Z1 = 5.0000 + 8.0000i

Z2=3+7i

Z2 = 3.0000 + 7.0000i

Z1+Z2

ans = 8.0000 + 15.0000i

Z1*Z2

ans = -41.0000 + 59.0000i

Z1/Z2

ans = 1.2241 - 0.1897i

magZ1=abs(Z1)

magZ1 = 9.4340

magZ2=abs(Z2)

magZ2 = 7.6158

angZ1=angle(Z1)

angZ1 = 1.0122

angZ2=angle(Z2)

angZ2 = 1.1659

mag=magZ1*magZ2

mag = 71.8471

ang=angZ1+angZ2

ang = 2.1781

x=mag*cos(ang)

x = -41.0000

```
y=mag*+sin(ang)
```

```
y = 59
```

```
ansZ=x+y*i
```

```
ansZ = -41.0000 + 59.0000i
```

Polynomial:

```
p=[5 6 -7 3 -5]
```

```
p = 1×5  
    5     6    -7     3    -5
```

```
x=5
```

```
x = 5
```

```
y=polyval(p,x)
```

```
y = 3710
```

```
roots(p)
```

```
ans = 4×1 complex  
-2.1067 + 0.0000i  
 0.9157 + 0.0000i  
-0.0045 + 0.7200i  
-0.0045 - 0.7200i
```

```
a=[4 6 1 -3]
```

```
a = 1×4  
    4     6     1    -3
```

```
b=[1 1]
```

```
b = 1×2  
    1     1
```

```
x=conv(a,b)
```

```
x = 1×5  
    4    10     7    -2    -3
```

```
g=[1 -9 -10]
```

```
g = 1×3  
    1    -9   -10
```

```
k=[1 1]
```

```
k = 1×2  
    1     1
```

```
[j,u]=deconv(g,k)
```

```
j = 1×2
```

```

      1   -10
u = 1x3
      0     0     0

```

```
polyder(p)
```

```

ans = 1x4
      20     18    -14     3

```

```
polyint(p)
```

```

ans = 1x6
      1.0000     1.5000    -2.3333     1.5000    -5.0000     0

```

Trigonometric:

```
sin(5.67)
```

```
ans = -0.5755
```

```
sind(60)
```

```
ans = 0.8660
```

```
sinpi(0.5)
```

```
ans = 1
```

```
asin(1)
```

```
ans = 1.5708
```

```
asind(0.63)
```

```
ans = 39.0501
```

```
sinh(53)
```

```
ans = 5.2069e+22
```

```
asinh(8.5)
```

```
ans = 2.8367
```

```
cos(346.787)
```

```
ans = 0.3513
```

```
cosd(45)
```

```
ans = 0.7071
```

```
cospi(1)
```

```
ans = -1
```

```
acos(0.73)
```

ans = 0.7525

acosd(0.76)

ans = 40.5358

cosh(23)

ans = 4.8724e+09

acosh(4.87)

ans = 2.2655

tan(5.89)

ans = -0.4148

tand(45)

ans = 1

atan(0.659)

ans = 0.5827

atand(465)

ans = 89.8768

tanh(4.2)

ans = 0.9996