```
>> A=[4 2*pi; 6*j 10+sqrt(2)*j]
A =
   4.0000 + 0.0000i 6.2832 + 0.0000i
   0.0000 + 6.0000i 10.0000 + 1.4142i
>> B=[6*j -13*pi; pi 16]
B =
   0.0000 + 6.0000i -40.8407 + 0.0000i
   3.1416 + 0.0000i 16.0000 + 0.0000i
>> a= A+B
a =
   4.0000 + 6.0000i -34.5575 + 0.0000i
   3.1416 + 6.0000i 26.0000 + 1.4142i
>> b= A*B
b =
   1.0e+02 *
   0.1974 + 0.2400i - 0.6283 + 0.0000i
  -0.0458 + 0.0444i 1.6000 - 2.2242i
>> c= A^2
c =
  16.0000 +37.6991i 87.9646 + 8.8858i
  -8.4853 +84.0000i 98.0000 +65.9834i
>> d= A'
d =
   4.0000 + 0.0000i 0.0000 - 6.0000i
   6.2832 + 0.0000i 10.0000 - 1.4142i
 >> e= inv(B)
   0.0799 - 0.0598i 0.2041 - 0.1527i
   -0.0157 + 0.0117i 0.0224 + 0.0300i
```

```
>> f= B'A'
f= B'A'
      1
```

Error: Unexpected MATLAB expression.

f =

1.0e+02 \*

$$>> g= A^2 + B^2 - A^B$$

g =

1.0e+02 \*

A =

B =

4

10 0

>> linsolve(A,B)

ans =

-1.4545

1.2078

0.4026

A.2 = ans

>>

```
f
Error: Unexpected MATLAB expression.

>> A2= ans

A2 =

-1.4545
    1.2078
    0.4026

>> x=[0:0.1:10];
>> w=10;
>> y=(exp(-0.5*x)).*sin(w*x);
>> plot(x,y)
>> title(' exp(-0.5x)sin(10x) plotted ')
>> grid
```

Name *	Value
⊞a	[4.0000 + 6.0000i,-34.5575 +
$\boxplus$ A	[5,6,10;-3,0,14;0,-7,21]
⊞A2	[-1.4545;1.2078;0.4026]
⊞ans	[-1.4545;1.2078;0.4026]
⊞b	[19.7392 + 24.0000i,-62.831
⊞B	[4;10;0]
Ξc	[16.0000 + 37.6991i,87.9646
Ξd	[4.0000 + 0.0000i,0.0000 - 6
ше	[0.0799 - 0.0598i,0.2041 - 0.1
LLI f	[19.7392 - 24.0000i, -4.5841
Шg	[-1.6804e+02+1.3699e+01i
Шw	10
Шx	1x101 double
Шy	1x101 double

