```
A=[2,1;3,2]
B=[3,1;2,2]
A'
В'
A1=A*B, A2=B*A, A3=(A'*B')', A4=(B'*A')'
A1=inv(A*B), A2=inv(A)*inv(B), A3=inv(B*A), A4=inv(B)*inv(A)
A1*(A*B),(A*B)*A1
C=[1,0,1;3,3,4;2,2,3;]
S=[10;12;5]
V = [19; -3; -9]
inv(C)*S
C*V
D=[2,4;1,2]
inv(D)
t=[0:0.01:10];
p=5*cos(2*pi*3*t);
v=5*exp(-0.5*t);
figure(1)
plot(t,p)
figure(2)
plot(t,v)
b=p.*v;
figure(3)
plot(t,b)
A =
     2
           1
     3
           2
B =
     3
           1
     2
           2
ans =
     2
           3
     1
           2
ans =
     3
           2
     1
           2
```

A1 =

8 4 13 7

A2 =

9 5 10 6

A3 =

9 5 10 6

A4 =

8 4 13 7

A1 =

1.7500 -1.0000 -3.2500 2.0000

A2 =

1.5000 -1.2500 -2.5000 2.2500

A3 =

1.5000 -1.2500 -2.5000 2.2500

A4 =

1.7500 -1.0000 -3.2500 2.0000

ans =

1 0 0 1 ans =

1.0000 -0.0000 0.0000 1.0000

C =

1 0 1 3 3 4 2 2 3

S =

10 12 5

V =

19 -3 -9

ans =

19.0000 -3.0000 -9.0000

ans =

10 12 5

D =

2412

Warning: Matrix is singular to working precision.

ans =

Inf Inf Inf Inf







