

```

%meleti tou systimatos aniktou broxou automatou elegxou 2hs taxis me bimatiki.To
systima kathistatai etsi tritis taxis.
%diatypwmenou stin typoiki morfi 1/s*(s^2+2*z*w0*s+w0^2)
clear all
syms w0 z t s y YM;
YM = 1/(s*(s^2+2*z*w0*s+w0^2));
y=ilaplace(YM,t);
y

clear t y z w0; %gia na min exw tis idies metablites kai se symbolic logic
%kai se kalsiko kwdika
t=[0:0.01:18];
%z=.2;w0=2%syglinei pio arga
z=.8;w0=2%syglinei grigora
%z=-0.2;w0=2%apoklinei
y=1/w0^2 - (cosh(t*w0*(z^2 - 1)^(1/2)) + (z*sinh(t*w0*(z^2 - 1)^(1/2))))./(z^2 -
1)^(1/2))./(w0^2*exp(t*w0*z));
figure
plot(t,y)

```