clc

clear

syms s t;

Hs = sym('(s+2)/(s^2+4\*s+3)');

ht=ilaplace(Hs);

ht=vpa(ht,4);

Vo1s=(1/s)\*Hs;

Vo1=ilaplace(Vo1s);

Vo1=vpa(Vo1,4);

Ugs=laplace(cos(20\*t));

Vo2s=Ugs\*Hs;

Vo2=ilaplace(Vo2s);

Vo2=vpa(Vo2,4);

Ums=laplace(exp(-t));

Vo3s=Ums\*Hs;

Vo3=ilaplace(Vo3s);

Vo3=vpa(Vo3,4);

figure(1)

subplot(2,1,1);

ezplot(ht,[0,10]);

subplot(2,1,2);

ezplot(Vo1,[0,10]);axis([0,5,0,1]);

figure(2)

subplot(2,1,1);

ezplot(Vo2,[0,10]);

subplot(2,1,2);

ezplot(Vo3,[0,10]);axis([0,5,0,1]);

