

```

close all;
clear all;
z=@ (x) -0.0005*x.^3+0.02*x.^2-0.19*x+2;
q=@ (x) -0.06*x.^2-0.13*x+376/125;
p=@ (x) -0.0005*x.^3+0.02*x.^2-0.19*x+1.8;
h=@ (x) 166/25*x-3154/125;
r=@ (x) 25*x;
mallaz=z(4:0.001:25);
mallax=(4:0.001:25);
mallaq=q(0:0.001:4);
mallax_2=(0:0.001:4);
mallap=p(4:0.001:25);
mallax_3=(4:0.001:25);
mallah=h(3.8:0.001:4);
mallax_4=(3.8:0.001:4);
figure (1)
plot(mallax, mallaz, '.-m' );
hold on;
plot(mallax_2,mallaq, '.-c');
hold on;
plot (mallax_3, mallap, '.-r');
hold on;
plot(mallax_4,mallah, '.-b');
figure (2)
[X3,Y3,Z3]=cylinder(mallaz);
Z3=(25-4)*Z3+4;
surf(X3,Y3,Z3);
hold on;
[X4,Y4,Z4]=cylinder(mallaq);
Z4=(4-0)*Z4+0;
surf(X4,Y4,Z4);
hold on;
[X5,Y5,Z5]=cylinder (mallap);
Z5= (25-4)*Z5+4;
surf(X5,Y5,Z5);
hold on;
[X6,Y6,Z6]=cylinder(mallah);
Z6=(4-3.8)*Z6+3.8;

```