

```

close all;
clear;

f = @(x) 0.01*x.^2 -0.19*x + 2.5;
g = @(x) 0.01*x.^2 -0.19*x + 2.3;
p = @(x) 0.37*x -3;
h = @(x) (141/200)*x - (109/8);
q = @(x) 50*x+2.5;

```

```

gx = 28-sqrt(254);
mallaf = f(0:0.2:25);
mallag = g(gx:0.2:24.5);
mallap = p(8:0.2:gx);
mallah = h(24.5:0.2:25);
mallaq = q(-0.05:0.002:0);

```

```

x1 = 0:0.01:25;
x2 = gx:0.01:24.5;
x3 = 8:0.01:gx;
x4 = 24.5:0.01:25;
x5 = -0.05:0.001:0;
figure(2)

```

```

plot(x2, g(x2));
hold on
plot(x1, f(x1));
plot(x3, p(x3));
plot(x4, h(x4));
plot(x5, q(x5));

```

```

hold off;

```

```

figure(3)
%%malla f
[X1,Y1,Z1] = cylinder(mallaf);
Z1 = 25* Z1;
surf(X1,Y1,Z1);

```

```

hold on;
%%malla g
[X2,Y2,Z2] = cylinder(mallag);
Z2 = (24.5-gx)* Z2 + gx;
surf(X2,Y2,Z2);
hold on;

```

```

%%malla p
[X3,Y3,Z3] = cylinder(mallap);
Z3 = (gx-8)* Z3 + 8;
surf(X3,Y3,Z3);
hold on;

```

```

%%malla h

```

```
[X4,Y4,Z4] = cylinder(mallah);  
Z4 = (25-24.5)*Z4 + 24.5;  
surf(X4,Y4,Z4);  
hold on;
```

```
%%malla q  
[X5,Y5,Z5] = cylinder(mallaq);  
Z5 = (-0.05)*Z5 -0.05;  
surf(X5,Y5,Z5);  
hold on;
```