

```
b1 = .05;
b2 = .5;
b3 = 5;
b4 = 50;
m = 1;
g = 9.8;
y=0;
x=0;
vt1 = (m*g)/b1;
vt2 = (m*g)/b2;
vt3 = (m*g)/b3;
vt4 = (m*g)/b4;
vox=1;
voy=1;
t = linspace(0,.25,1000);
x1 = ((vox*vt1)/g)*(1-exp((-g.*t)/vt1));
y1 = (vt1/g)*(voy+vt1)*(1-exp((-g.*t)/vt1))-vt1.*t;
x2 = ((vox*vt2)/g)*(1-exp((-g.*t)/vt2));
y2 = (vt2/g)*(voy+vt2)*(1-exp((-g.*t)/vt2))-vt2.*t;
x3 = ((vox*vt3)/g)*(1-exp((-g.*t)/vt3));
y3 = (vt3/g)*(voy+vt3)*(1-exp((-g.*t)/vt3))-vt3.*t;
x4 = ((vox*vt4)/g)*(1-exp((-g.*t)/vt4));
y4 = (vt4/g)*(voy+vt4)*(1-exp((-g.*t)/vt4))-vt4.*t;
hold on;
plot(x1,y1);
plot(x2,y2);
plot(x3,y3);
plot(x4,y4);
```

