g=9.8;

a1=pi/12;

a2=35/180\*pi;

a3=50/180\*pi;

v0=10;

y0=50;

t=linspace(0,10,101);

x=(v0\*cos(a1))\*t;

y=-1/2\*g\*t.^2+(v0\*sin(a1))\*t+y0;

x1=x(y>0);

y1=y(y>0);

plot(x1,y1,'r--')

hold on

x=(v0\*cos(a2))\*t;

y=-1/2\*g\*t.^2+(v0\*sin(a2))\*t+y0;

x2=x(y>0);

y2=y(y>0);

plot(x2,y2,'b--')

hold on

x=(v0\*cos(a3))\*t;

y=-1/2\*g\*t.^2+(v0\*sin(a3))\*t+y0;

x3=x(y>0);

y3=y(y>0);

plot(x3,y3,'g--')