Discrete Functions

x=1:5:200;

n=200;

p=0.03;

p1=0.5;

p2=1;

lamb=n\*p;

lamb1=n\*p1;

lamb2=n\*p2;

%binomail function

figure(1)

a=binopdf(x,n,p);

subplot(3,2,1)

stem(a)

grid on;

hold on;

title('Binomial Probability Mass Function with p=0.03')

b=binocdf(x,n,p);

subplot(3,2,2)

stairs(b)

grid on;

hold on;

title('Binomial Cumilative Distribution Function with p=0.03')

a1=binopdf(x,n,p1);

subplot(3,2,3)

stem(a1)

grid on;

hold on;

title('Binomial Probability Mass Function with p=0.5')

b1=binocdf(x,n,p1);

subplot(3,2,4)

stairs(b1)

grid on;

hold on;

title('Binomial Cumilative Distribution Function with p=0.5')

a2=binopdf(x,n,p2);

subplot(3,2,5)

stem(a2)

grid on;

hold on;

title('Binomial Probability Mass Function with p=1')

b2=binocdf(x,n,p2);

subplot(3,2,6)

stairs(b2)

grid on;

hold on;

title('Binomial Cumilative Distribution Function with p=1')

%possion function

figure(2)

c=poisspdf(x,lamb);

subplot(3,2,1)

stem(c)

grid on;

hold on;

title('Poissons Probability Mass Function with p=0.03')

d=poisscdf(x,lamb);

subplot(3,2,2)

stairs(d)

grid on;

hold on;

title('Poissons Cumilative Distribution Function with p=0.03')

c1=poisspdf(x,lamb1);

subplot(3,2,3)

stem(c1)

grid on;

hold on;

title('Poissons Probability Mass Function with p=0.5')

d1=poisscdf(x,lamb1);

subplot(3,2,4)

stairs(d1)

grid on;

hold on;

title('Poissons Cumilative Distribution Function with p=0.5')

c2=poisspdf(x,lamb2);

subplot(3,2,5)

stem(c2)

grid on;

hold on;

title('Poissons Probability Mass Function with p=1')

d2=poisscdf(x,lamb2);

subplot(3,2,6)

stairs(d2)

grid on;

hold on;

title('Poissons Cumilative Distribution Function with p=1')

%geometric function

figure(3)

e=geopdf(x,p);

subplot(3,2,1)

stem(e)

grid on;

hold on;

title('Geometric Probability Mass Function with p=0.03')

f=geopdf(x,p);

subplot(3,2,2)

stairs(f)

grid on;

hold on;

title('Geometric Cumilative Distribution Function with p=0.03')

e1=geopdf(x,p1);

subplot(3,2,3)

stem(e1)

grid on;

hold on;

title('Geometric Probability Mass Function with p=0.5')

f1=geocdf(x,p1);

subplot(3,2,4)

stairs(f1)

grid on;

hold on;

title('Geometric Cumilative Distribution Function with p=0.5')

e2=geopdf(x,p2);

subplot(3,2,5)

stem(e2)

grid on;

hold on;

title('Geometric Probability Mass Function with p=1')

f2=geocdf(x,p2);

subplot(3,2,6)

stairs(f2)

grid on;

hold on;

title('Geometric Cumilative Distribution Function with p=1')