Matthew Murphy (20p)

Using the following MatLab code:

function binomial()

 p = .75;

 N = 10;

 X = 1:N;

 Y = binocdf(X, N, p);

 figure;

 plot(X, Y)

 title(sprintf('Binmomail CDF p=%s', p));

 Y = binopdf(X, N, p);

 figure;

 plot(X, Y)

 title(sprintf('Binmomail PDF p=%s', p));

end

I produced the following graphs:



I discovered when p is increased the PDF peak moves to the right. The peak was above p.

The point of inflection moved right for the CDF. It was probably equal to p.

I used the following MatLab code:

function geometric

 p = 0.75;

 X = 0:10;

 Y = geopdf(X, p);

 figure;

 plot(X, Y)

 title(sprintf('Geometric PDF p=%s', p));

 Y = geocdf(X, p);

 figure;

 plot(X, Y)

 title(sprintf('Geometric CDF p=%s', p));

end

To generate the following graphs:



As p increased the PDF dropped faster. It looks like y(0)=p.

The CDF increased faster. It looks like y(0)=p.