(20p, no graphs but a list of values is fine)

A) For a probability mass function of a binomial function as the value of p increases, the values increase and slide from left to right. In other words for any given trial with a higher value of P, then there is a greater chance of success with more trials.

For a cumulative distribution function, as the value of p increase the inflection point of the curve slides to the right. This indicates that it takes more trials to reach a point where it is highly likely for failure.

For a geometric distribution, as p decreases the function becomes more similar to a straight line. When p increase the pmf appears to have an asymptote

For a cumulative distribution, as p increase the curve slides to the left, and as p decreases it slides further to the right.

Binomial

N p k

2 .01 .980, .20, .000

3 .05 .857, .135, .007, .000

4 .1 .656, .292, .049, .004, .000

5 .2 .328, .410, .205, .051, .006, .000

Geometric distribution

P = .5

0 0.5

1 0.25

2 0.125

3 0.0625

4 0.03125

5 0.015625

6 0.0078125

7 0.00390625

8 0.001953125

P = .7

0 0.7

1 0.21

2 0.063

3 0.0189

4 0.00567

5 0.001701

6 5.103E-4

7 1.5309E-4

8 4.5927E-5