Statistics – Binomials

(When to use: binompdf or binomcdf)

To find on the calculator: 2nd, vars, and scroll down

n = sample size
p = percent given
r = number of successes (number looking for)

1. Exact number, such as all, half, none, or a specific number: binompdf(n,p,r)

2. No more than, at most, does not exceed: binomcdf(n,p,r)

3. Less than or fewer then: binomcdf(n,p,r-1)

4. At least, or more, no fewer than, not less than: 1 – binomcdf(n,p,r-1)

5. More than: 1 – binomcdf(n,p,r)

6. Between two numbers, where a is the small number and b is the larger number: binomcdf(n,p,b) – binomcdf(n,p,a-1)

7. Looking for n, to be at least P% sure: 1 – binomcdf(n,p,r-1)  
   [Guess numbers for n]

8. Normal approximation to the binomial distribution: Subtract 0.5 from lower bound, add 0.5 to upper bound

p = success
q = 1 - p
μ = np
σ = \sqrt{npq}