Study Questions
Chapter 15
Math 104
Fall 2015

Read pages 255 - 261 in the textbook, and then answer the following questions based on the reading.

1. What kinds of problems are binomial coefficients used to solve?

2. What does the ! notation mean in mathematics?

3. The binomial formula is

\[ \frac{n!}{k!(n-k)!} p^k (1-p)^{n-k}. \]

   (a) What does \( n \) represent?

   (b) What does \( k \) represent?

   (c) What does \( p \) represent?
4. What does the binomial formula tell you?

5. What assumptions must be true for the binomial formula to work?

6. What is the shorthand notation that mathematicians use for the binomial coefficient?