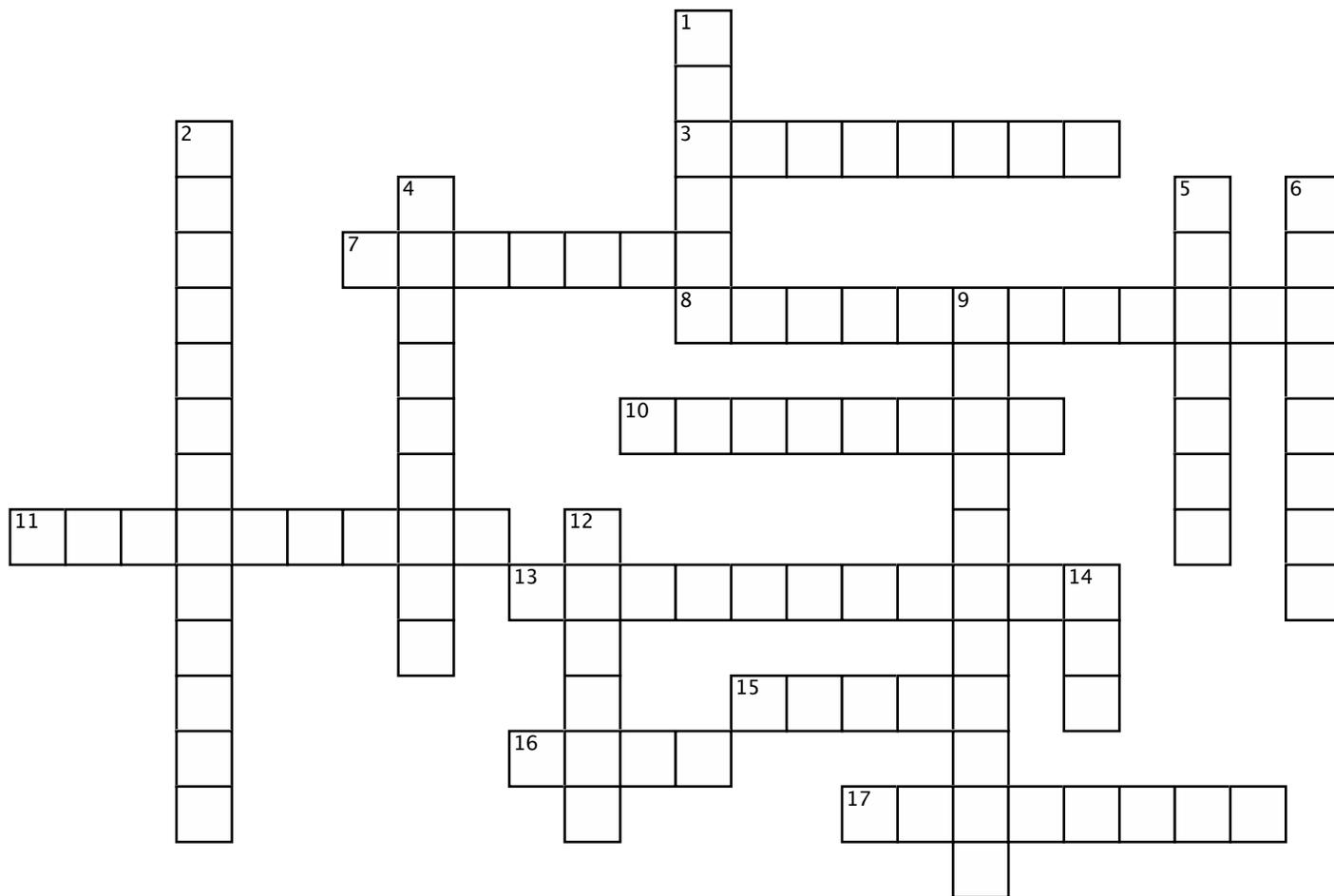# YMS Ch8: The Binomial Distributions
AP Statistics at LSHS
Mr. Molesky

Across

3. In the geometric setting, 1/p can be used to find the _ number of trials required to get a success
7. French mathematician who published a series of books on probability theory.
8. The binomial _ can be summarized by B(n,p)
10. TI command to find P(X≤k) in B(n,p)
11. This setting is like the binomial, but there is not a fixed number of trials
13. The number of ways of arranging k success among n observations is given by the binomial _ {aka nCk}
15. To be a binomial setting, there must be a _ number of observations
16. Geometric distribution situations can be thought of as _ time situations.
17. TI command to find the probability of a single value of a binomial random variable.

Down

1. Shape of a geometric distribution
2. If n is large enough, we can calculate binomial probabilities using the normal _
4. Notation seen here n!=n(n-1)(n-2)...(2)(1)
5. Binomial observations fall into one of two categories: "success" or "_"
6. Situation in which a fixed number of independent observations exist, each of which falls into one of two categories with the same probability of "success" for each observation.
9. Knowing the result of one observation tells you nothing about the other observations.
12. As the number of trials increases, the binomial distribution gets closer to a _ distribution
14. As a rule of thumb, use the normal approximation when np and n(1-p) are greater than _