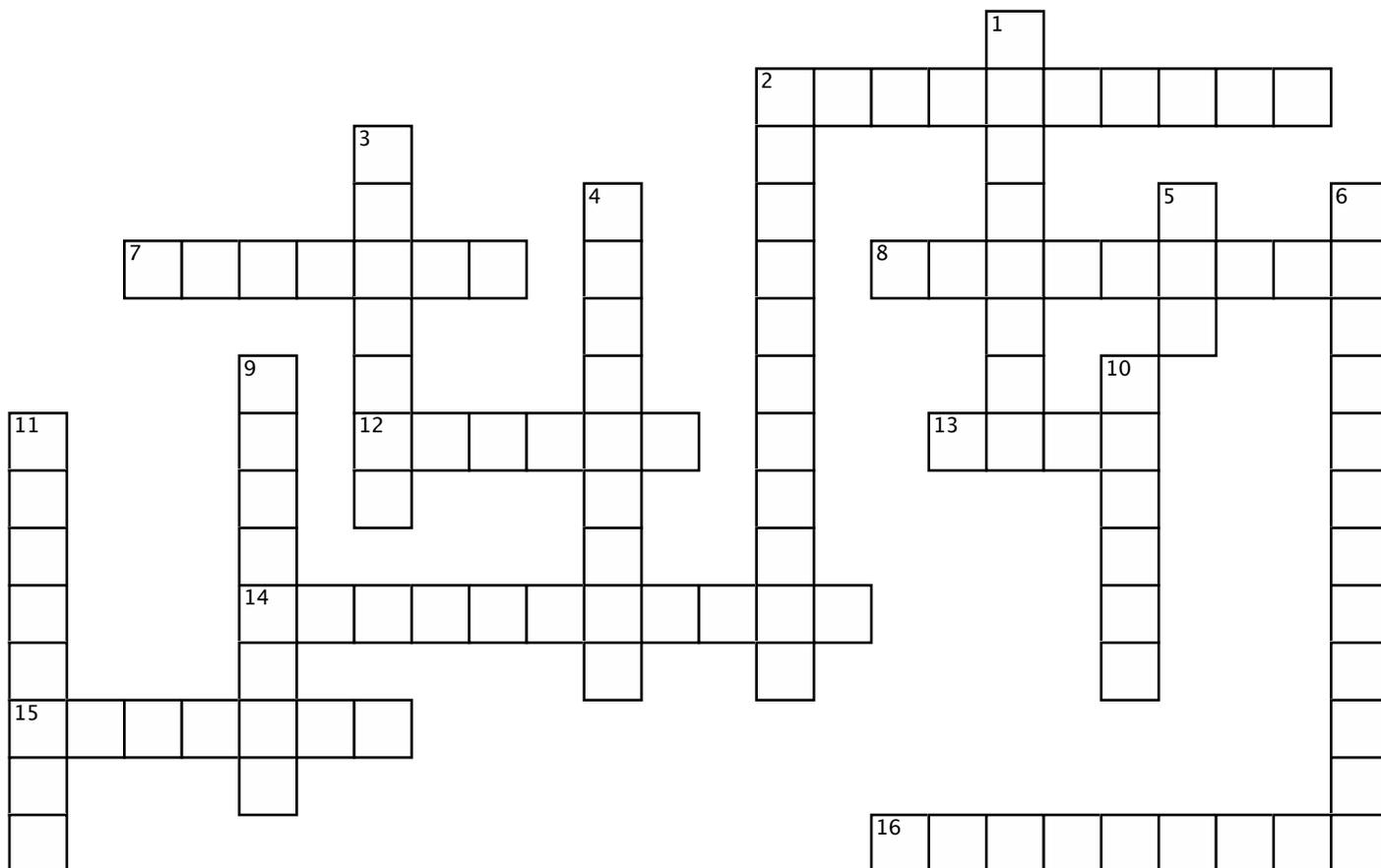


# YMS Ch7: Random Variables

AP Statistics at LSHS

Mr. Molesky



## Across

2. Random variable that takes on all values in an interval
7. Type of curve that describes the probability distribution of a continuous random variable
8. Swiss family of mathematicians. Jakob made significant contributions to probability
12. A variable whose value is a numerical outcome of a random phenomenon
13. Probability of an individual outcome in a continuous probability distribution
14. When random variables are not independent, the variance of their sum depends on the \_ between them.
15. Law of large \_: As the number of observations increases, the mean of the observations approaches the true mean of the population.
16. Square root of the variance: standard \_

## Down

1. Random variable that has a countable number of possible values
2. Any linear \_ of independent normal random variables is also normally distributed
3. This distribution's density curve looks like a rectangle
4. Probability distributions of discrete random variables can be pictured using a \_
5. If  $X$  and  $Y$  are independent random variables, the variance of  $X \pm Y$  is the \_ of the variances of  $X$  and  $Y$
6. The probability \_ of a random variable tells us the possible values of  $X$  and how probabilities are assigned to those values
9. The mean of a random variable is called its \_ value
10. Name for a distribution described by  $N(\mu, \sigma)$
11. A measure of variability around the mean