

Honors Statistics

Constructing Binomial Distributions

Name _____

Period ____ Date _____

Consider a binomial distribution with $n = 5$ trials. Make each histogram showing the probabilities for $n = 0, 1, 2, 3, 4,$ and 5 successes for each of the following. Comment on the skewness of each distribution.

a. The probability of success is $p = 0.50$

b. The probability of success is $p = 0.25$

c. The probability of success is $p = 0.75$

d. What is the relationship between the distributions show in parts (b) and (c)?

e. If the probability of success is $p = 0.73$, do you expect the distribution to be skewed to the right or to the left? Why?