

DISCRETE RANDOM VARIABLES: PRACTICE 5; HYPERGEOMETRIC DISTRIBUTION

STUDENT LEARNING OUTCOMES:

- **THE STUDENT WILL INVESTIGATE THE PROPERTIES OF A HYPERGEOMETRIC DISTRIBUTION.**

GIVEN:

Suppose that a group of statistics students is divided into two groups: business majors and non-business majors. There are 16 business majors in the group and 7 non-business majors in the group. A random sample of 9 students is taken. We are interested in the number of business majors in the group.

INTERPRET THE DATA:

1. In words, define the Random Variable X.
2. $X \sim$ _____
3. X takes on the values: _____
4. Construct the probability distribution function (PDF) for X.

x	P(X=x)
0	0.1
1	0.2
2	0.3
3	0.2
4	0.1
5	0.05
6	0.05

5. On average (μ), how many would you expect to be business majors?