

Binomial Probability

You are told that 30% of college students own an iPhone.

Suppose we take a random sample of 50 students, and find that 20 of them own an iPhone.

a) Find the probability that a random sample of 50 college students contains 20 or more iPhone owners, if 30% of college students own an iPhone.

b) Would it be an unusual event for a random sample of 50 college students to have 20 or more iPhone owners? (*Recall that an unusual event occurs less than 5% of the time.*)