**Assignment 4.5**

1. A recent national study showed that approximately 44.7% of college students have used Wikipedia as a source in at least one of their term papers. Let X equal the number of students in a random sample of size n = 31 who have used Wikipedia as a source.

Perform the below functions

1. Find the probability that X is equal to 17

Here n=31, prob=44.7/100

Using dbinom(q,n,p)

Dbinom(17, 31, 44.7/100)



1. Find the probability that X is at most 13

Pbinom(13, 31, 44.7/100)



1. Find the probability that X is bigger than 11.

Pbinom(11, 31, 44.7/100, lower.tail = FALSE)



1. Find the probability that X is at least 15.

Pbinom(15, 31, 44.7/100)



e. Find the probability that X is between 16 and 19, inclusive

sum(dbinom(16:19, 31, 44./100))

