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

a. Find the probability that X is equal to 17

b. Find the probability that X is at most 13

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

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

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

Ans: Probability X=17, 17/31\*.447

[1] 0.245129

2)

1/31+2/31+3/31+4/31+5/31+6/31+7/31+8/31+9/31+10/31+11/31+12/31+13/31

[1] 2.935484

> \*2.935\*.447

Mu=1.31

3)Mu=6.19

|  |
| --- |
| > 31\*32/2  [1] 496  > 11\*12/2  [1] 66  > 496-66  [1] 430  > 430/31  [1] 13.87097  > 13.87\*.447  [1] 6.19989 |
|  |
| |  | | --- | | > | |

4) Mu=5.67

|  |
| --- |
| 31\*32/2  [1] 496  > 14\*15/2  [1] 105  > 496-105  [1] 391  > 391/31  [1] 12.6129  > 391/31\*.447  [1] 5.637968 |
|  |
| |  | | --- | | > | |

e)Mu=1.009

|  |
| --- |
| 19\*20/2  [1] 190  > 15\*16/2  [1] 120  > 190-120  [1] 70  > 70/31  [1] 2.258065  > 70/31\*.447  [1] 1.009355 |
|  |
| |  | | --- | | > | |