

Assignment 8.3

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# Assignment 8.3

# A Recent national study showed that approximately 44.7% of college
# students have used Wikipédia as a source in at least one of their term paper
# Let X be equal the number of students in a random sample of size n 31 who
# have
# used Wikipedia as a source.
# Perform the below operations:

# A. Find the probability that X is equal to 17

# x = Value
# p = 1/3
# n = 31

pbinom(17,31,1/3)

## [1] 0.9959538

# B. Find the probability that X is at most 13

pbinom(13,31,1/3)

## [1] 0.8848157

# C. Find the probability that X is bigger than 11

##pbinom(X>=11,n,p) = 1 - p(X<=11,n,p)
1- pbinom(11,31,1/3)

## [1] 0.3225039

# D. Find the probability that X is atleast 15

##pbinom(X>=15,n,p) = 1 - p(X<=15,n,p)
1- pbinom(15,31,1/3)

## [1] 0.02702409

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

##pbinom(X>=16,n,p) + p(X<=19,n,p)
## 1 - pbinom(X<=16,n,p) + p(X<=19,n,p)
1- pbinom(16,31,1/3)+pbinom(19,31,1/3)
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## [1] 1.010705
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R Markdown

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When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
##summary(cars)
```

Including Plots

You can also embed plots, for example:

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.