# Lec18_3

## R Markdown

a. Poisson. Because the count of children has no upper limit.

b. Binomial. Because the variable "if the first child is male" has only 2 possible values which are yes or no(special cases exist in real life, but in general this is an yes or no qustion).

c. Poisson. Becasue the number of one picked up his/her phone within a time range can potentially take any values.

d.

 i. Poisson. Number of people is not restricted with 0 and 1.
 ii. Binomial. One either got on the bus or not, so the variable only has 2 possible values.

e. Poisson. within a time period, the word can appear many times with no maximum amount.

f. Binomial. Professor either has at least one typo or no typo at all, therefore only 2 possible outcomes.

g. Poission. The number of sleeping students during a lecture may take any values, and this number is unlikely to be upper bounded by 1.