

1. [5 pts] Let X be a discrete random variable with possible values in the set B and pmf $F : B \rightarrow [0, 1]$. Then

$$E(X) = \sum_{x \in B} \underline{\hspace{2cm}}.$$

2. [10 pts] Suppose X is a binomial random variable with parameters n and p .

X can be interpreted as:

the number of _____ in n _____

if the _____ of _____ in each trial is p .

3. [10 pts] Suppose X is a geometric random variable with parameter and p .

X can be interpreted as:

the number of _____,

each with probability of success _____,

that is required to achieve the _____.