

Point Estimation

Consider a random experiment. Let X denote a random observation or random outcome of the experiment.

eg: Tossing of a coin. The outcome may be H or T. Let $X=1$ if H, 0 if T. When X may be looked upon as the random outcome.

We shall denote by x a typical realization and by ω the sample space i.e. set of all possible values of X .
In the example, X is a single variable. However X may also be a random vector.

eg: Consider an exp. of tossing a coin twice. The possible outcomes are $(H,H), (H,T), (T,H), (T,T)$.

Let $X_1=1$ if the first throw gives a head

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Second

" " " " " " " " " " " "

tail