Principles of Estimation 1.Random Sample: A set of random variables X1, X2, ..., Xn is called a random sample from a population with probability density function f(x; ?) or cumulative distribution function F(x; ?) if they are independent and identically distributed.Definition of Estimation and Estimator: If we use the value obtained from an estimator function as an approximation for the parameter ?, the obtained number is called an estimate and the random variable of the obtained function is called an estimator for ?.The role of the estimator function is to combine and summarize the sample members to obtain information about the unknown parameter and find its estimate, Draper, N and Smith, H (1998) .Parameter: A parameter is a characteristic of a population that is typically a function of all members of the population.An estimator is a random variable whose probability distribution may or may not depend on the parameter ?, but the parameter ?Estimator: A function u = g(X1, ..., Xn) defined on a random sample is called an estimator.The estimator is also called a statistic.Introduction 1.The values of parameters are usually unknown.is an unknown parameter.2.Here, ?In most cases, random samples are assumed to be independent.3.itself does not appear in the function.

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