

# Sampling

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## Random Sampling:

Every member of the population is selected in such a way that each member has equal chance of being selected.

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## Simple Random Sample:

Every possible sample of the same size has the same chance of being selected.

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## Methods of Sampling:

Name	Definition	Example
<b>Systematic</b>	Pick a starting point, then select every <i>k</i> th element from the population,	Select every 20 <sup>th</sup> person that walks into the mall.
<b>Convenience</b>	Use results that are easy to get.	Ask friends or relatives.
<b>Stratified</b>	Divide populations into at least two groups such that each groups have the same characteristics, then draw samples from each group.	Divide population into different age groups, then select 50 from each group.
<b>Cluster</b>	Divide populations into sections/clusters, randomly select some of those sections, then choose all the members from those selected sections.	Consider all math classes on campus, randomly select 20 sections, and then ask every student in these 20 sections about their GPA.

## Sampling Error:

The difference between a sample result and the true population result.