**Population & Sample**

### **Population**

Population means the aggregation of all the elements under study with one or more common features.

### **Sample**

A sample is a subset of the population for whom you actually have data.

Diagram

Description automatically generated

### **Population Parameters and Sample Statistics**

The mean *x̄* and the standard deviation *s* are the most commonly used in practice. The formulas that define *x̄* and *s* refer to sample data.

A **parameter**is a numerical summary of the population, and

a **statistic**is a numerical summary of a sample.