

Stats and Probability

Data Collection

on
→ people
FACEBOOK multi-billionaire
industry
↳ Big Data

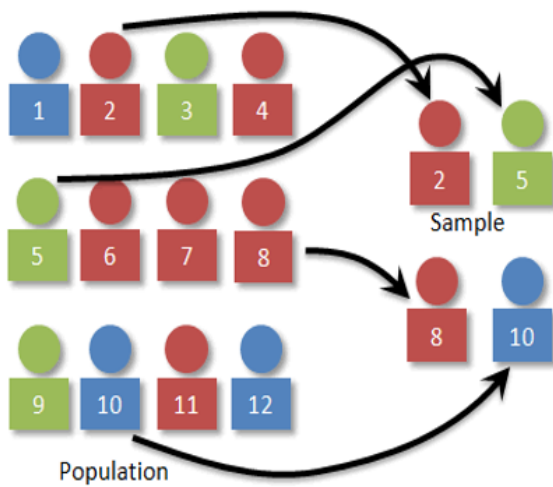
Definitions

→ goal: study a group of people.

ex: Shannon's class

↳ a population is all the people in Shannon's class

a sample of the population is a subset/subgroup that ideally represents population.



→ for a sample to be representative of a population, it must have same ratios:

- age
- ethnicity/nationality
- height (sports)
- linguistic
- socio-economical...
- lifestyle habits
- sexes ~~too~~

→ if not the same the sample is biased.

3 types of statistical surveys

- sample survey / questionnaire → for a sample of population.
 - ↳ easy
 - ↳ low cost
 - ↳ less accurate
 - census → a survey of entire population
 - ↳ hard/long
 - ↳ high cost
 - ↳ accurate
 - study → in-depth / qualitative survey / study
 - ↳ expensive
 - ↳ complicated
- ↳ income bracket
↳ quantitative
- ↳ wants/desire

1 a) pop

b) pop

c) pop

d) sample

e) pop

g) pop

all

f) sample

h) study

- a) sample
- b) sample
- c) census
- d) census
- e) census