

MTH 115

Some Vocabulary Words and Concepts Used in Statistics

Population
Sample
Descriptive
Inferential
Variable
Observational studies
Experimental studies
Types of data (Categorical – nominal vs ordinal, Numerical – discrete vs continuous)
Pie chart
Bar chart
Histogram (frequency and relative frequency)
Stem-and-leaf display
Box plot
Scatterplot
Describing the distribution of data
Measures of center: mean, median, mode
Measures of variability: range, interquartile range, variance, standard deviation
Percentiles
Population parameters (mean, variance, etc.)
Probability
Random variables
Discrete random variable
Continuous random variable
Describing the distribution of a random variable (probability and density functions)
Binomial distribution
Uniform distribution
Normal distribution
Identifying significant values
z-table
Random sampling from a population
Sampling distribution of the sample mean, sample proportion
Central Limit Theorem (CLT)
Point Estimation
Interval Estimation
Hypothesis testing
t-table
Inferences involving one-sample, two-samples
Correlation and linear regression
Chi-Square goodness-of-fit tests
 χ^2 -table
Analysis of variance