statistics_not.md 1/13/2022

Statistics - Notations

- Population Proportion \$P\$
- Sample Proportion \$p\$
- Set of population elements \$X\$
- Set of sample elements \$x\$
- Set of population size \$N\$
- Set of sample size \$n\$
- Population Mean \$μ\$
- Sample Mean \$x⁻\$
- Standard deviation of a population \$δ\$
- Standard deviation of a sample \$s\$

Population specific Parameters

- Population mean \$μ\$
- Standard deviation of a population \$δ\$
- Variance of a population \$μ^2\$
- Proportion of population elements having a particular attribute \$P\$
- Proportion of population elements having no particular attribute \$Q\$
- Population correlation coefficient based on all of the elements from a population \$p\$
- Number of elements in a population \$N\$

Sample specific Parameters

- Sample mean \$x^\$
- Standard deviation of a sample \$s\$
- Variance of a sample \$s^2\$
- Proportion of sample elements having a particular attribute \$p\$
- Proportion of sample elements having no particular attribute \$q\$
- Population correlation coefficient based on all of the elements from a sample \$r\$
- Number of elements in a sample.\$n\$

Linear Regression

- Intercept constant in a population regression line \$B_0\$
- Regression coefficient in a population regression line \$B_1\$
- Coefficient of determination \$R^2\$
- Intercept constant in a sample regression line \$b_0\$
- Regression coefficient in a sample regression line \$b_1\$
- Standard error of the slope of a regression line \$b^s_1\$

statistics_not.md 1/13/2022

Permutation/Combination

- Factorial value of n \$n!\$
- Number of permutations of n things taken r at a time \$^nP^r\$
- Number of combinations of n things taken r at a time \$^nC^r\$