

## Minitab Commands:

### Statistics

#### Descriptive Statistics:

Stat > Basic Statistics > Display Descriptive Statistics

#### Frequency and Cumulative Frequency:

Stat > Tables > Tally Individual Variables

### Graphs

#### Pie Chart:

Graph > Pie Chart

#### Bar Chart:

Graph > Bar Chart

#### Histogram:

Graph > Histogram

#### Stem and Leaf plot:

Graph > Stem-and-Leaf

#### Boxplot:

Graph > Boxplot

#### Scatterplot:

Graph > Scatterplot

#### Normal Probability Plot:

Graph > Probability Plot

### Hypothesis Test and Confidence Interval for parameter $\mu$

#### Single population mean, $\mu$ , **known** $\sigma$ :

Stat > Basic Statistics > 1-Sample Z

#### Single population mean, $\mu$ , **unknown** $\sigma$ :

Stat > Basic Statistics > 1-Sample t

#### Two **independent** population means, $\mu_1$ - $\mu_2$ :

Stat > Basic Statistics > 2-Sample t

#### Two **dependent** population means, $\mu_d$ :

Stat > Basic Statistics > Paired t

## Nonparametric Tests and Confidence Intervals

### Sign Test for median:

Stat > Nonparametrics > 1- Sample Sign

### Two Independent Samples Test: Wilcoxon Rank-Sum Test (Mann-Whitney U TEST)

Stat > Nonparametrics > Mann-Whitney

### Two Dependent Samples Test: Wilcoxon Signed-Rank Test

Stat > Nonparametrics > 1-Sample Wilcoxon

### Two **dependent** population means, $\mu_d$ :

Stat > Basic Statistics > Paired t

## Hypothesis Test and Confidence Interval for parameter $\sigma$

### Single population standard deviation, $\sigma$ :

Stat > Basic Statistics > 1 Variance

### Two population standard deviations, ( $H_0: \sigma_1 = \sigma_2$ ):

Stat > Basic Statistics > 2 Variances

### More than Two population standard deviations, ( $H_0: \sigma_1 = \sigma_2 = \dots = \sigma_i$ ): Brown-Forsyth-Levene (BFL)

Stat > ANOVA > Test for Equal Variances

## ANOVA

### One Factor ANOVA:

Stat > ANOVA > One-Way

### Nonparametric ANOVA: The Kruskal-Wallis Test:

Stat > ANOVA > Kruskal-Wallis

### Two Factor ANOVA:

Stat > ANOVA > Two-Way

## Hypothesis Test and Confidence Interval for parameter $\pi$

### Single population proportion, $\pi$ :

Stat > Basic Statistics > 1 Proportion

### Two population proportions, $\pi_1 - \pi_2$ :

Stat > Basic Statistics > 2 Proportions

**Linear Regression:** Stat > Regression > Regression