|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Population Parameter** | **Sample Statistic** | *Population Variance is Known* | | | **Z vs. T Decision Rules & Degrees of Freedom** |
| **Standard Deviation of the Sample Statistic (Standard Error)** | **Confidence Interval** | **Hypothesis Testing** |
| Mean μ |  |  |  |  | Use *s* as an estimate of when is unknown. Use T dist with n-1 DF or normal approx. if n is sufficiently large (~30) |
| Difference in means |  | Pooled Variances:  Unequal Variances: |  |  |
| Proportion *p* | *P* |  |  |  | Use P as an estimate of p when p is unknown. Use Z if nP>10 & n(1-P)>10 or p is known, else use T with n-1 DF |
| Difference in Proportions |  | Assume unknown p’s: |  |  |