



ASQ CRE Prep course

Lesson II. B. 3. a.

Hypothesis Testing

The Process



What does it mean?

STATISTICAL COMPARISONS

Drawing Conclusions

- **Observe a sample**
- **Surmise something about the population**

7 Step Process

- 1. Define the problem**
- 2. Null hypothesis**
- 3. Alt. hypothesis**
- 4. Critical Value**
- 5. Test Statistic**
- 6. Make an inference**
- 7. Communicate**



Hypothesis Testing Terms

- **Null Hypothesis**
- **Test Statistic**
- **Types of Errors**
 - **Type I error**
 - **Type 2 error**
- **One and two tailed tests**

| | | Null Hypothesis | True | False |
|---------------|----------------------|-----------------|------|-------|
| Decision Made | Fail to Reject H_0 | | | |
| | Reject H_0 | | | |
| | | | | |
| | | | | |

What is lower
practical limit of
confidence?



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For Means