

10.1 Estimating a Population Mean

**The Problem of Unknown  $\sigma$**

**The  $t$  Distributions; Degrees of Freedom**

## Conditions for Constructing a Confidence Interval About a Mean

## One-sample $t$ Interval for a Population Mean

## More About the Margin of Error

## Choosing Sample Size for a Desired Margin of Error When Estimating $\mu$

## 10.2 Estimating a Difference in Means

### Conditions for Constructing a Confidence Interval about a Difference in Means

### Two-Sample $t$ Interval for a Difference Between Two Means

**DEFINITION: Paired Data**

**Analyzing Paired Data**

**Conditions for Constructing a Confidence Interval about a Mean Difference**

**One-Sample  $t$  Interval for a Mean Difference**  
(Paired  $t$  Interval for a Mean Difference)

