

## Works!

You have learned about PHStat add-in to Microsoft Excel® in the previous chapters. You have seen that it contains different functions related to statistical experiments. In this section, you will learn how to construct confidence intervals using PHStat in Microsoft Excel®.

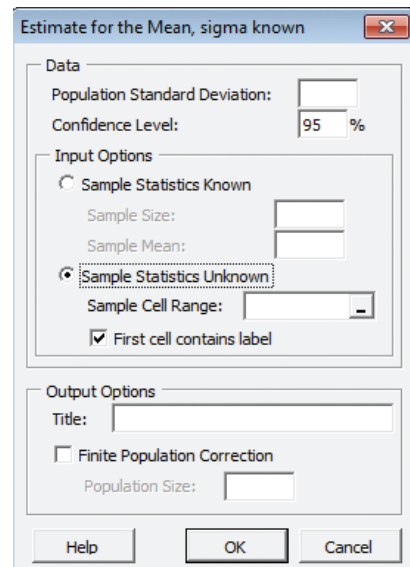
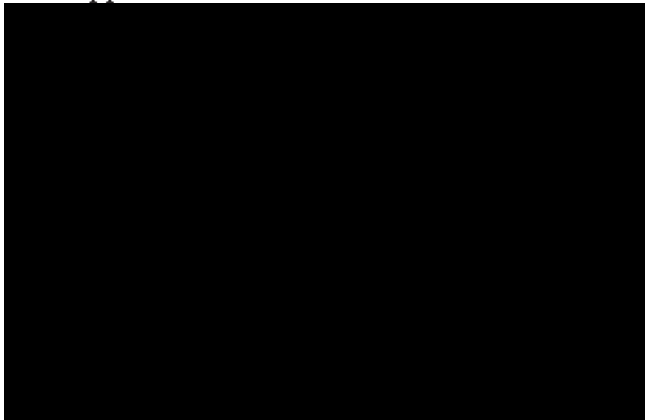
Open Microsoft Excel® and enable PHStat as you did in the previous chapters. Then follow each set of instructions below.

### Estimation of the Population Mean ( $\sigma$ known)

1. After enabling PHStat, click **Add-Ins**. Under the **Menu Commands** group, click **PHStat**.



2. Select **Confidence Intervals**, then **Estimate for the Mean, sigma known**. The Estimate for the Mean, sigma known window will appear.



The dialog box is titled "Estimate for the Mean, sigma known" and contains the following fields and options:

- Data**
  - Population Standard Deviation: [ ]
  - Confidence Level: 95 %
- Input Options**
  - Sample Statistics Known
    - Sample Size: [ ]
    - Sample Mean: [ ]
  - Sample Statistics Unknown
    - Sample Cell Range: [ ]
    - First cell contains label
- Output Options**
  - Title: [ ]
  - Finite Population Correction
    - Population Size: [ ]
- Buttons: Help, OK, Cancel

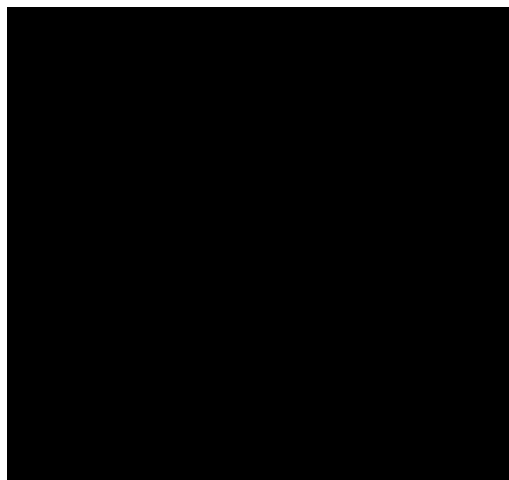
### Estimation of the Population Mean ( $\sigma$ unknown)

1. After enabling PHStat, click **Add-Ins**. Under the **Menu Commands** group, click **PHStat**.
2. Select **Confidence Intervals**, then **Estimate for the Mean, sigma unknown . . .**. The Estimate for the Mean, sigma unknown window will appear.



### Estimation of the Population Proportion

1. After enabling PHStat, click **Add-Ins**. Under the **Menu Commands** group, click **PHStat**.
2. Select **Confidence Intervals**, then **Estimate for the Proportion**. The Estimate for the Proportion window will appear.





### **Estimation of the Population Variance**

1. After enabling PHStat, click **Add-Ins**. Under the **Menu Commands** group, click **PHStat**.
2. Select **Confidence Intervals**, then **Estimate for the Population Variance....**  
The Estimate for the Population Variance window will appear.

