## Chapter 19:   1-Proportion command in Minitab 17

for confidence intervals and hypothesis tests on one mean

In this document, find

- Computing the p-value for a hypothesis test on one mean
- Computing a confidence interval of one mean
- Choosing to graph the data, if you have a full dataset instead of summarized data

The first step is to choose the menu Stat > Basic Statistics and then make an appropriate choice for your data.   For one proportion it is the 1-Proportion command.
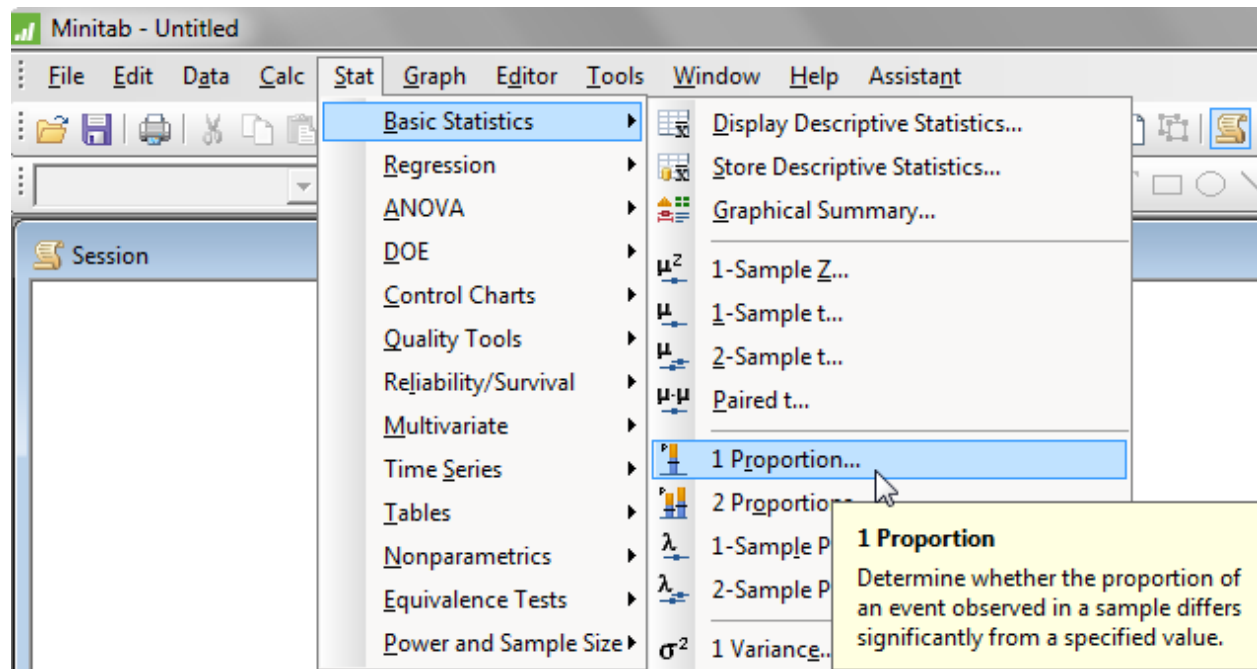
You must choose whether you are giving it a full data-set in one of the columns of the worksheet or whether you are ignoring all columns in the worksheet and just giving the summary statistics of your data.

To the right here is the worksheet for a full dataset.

Our text does not give any full datasets for proportion problems, but only gives summarized data. **Thus, I will illustrate only summarized data in this handout.**
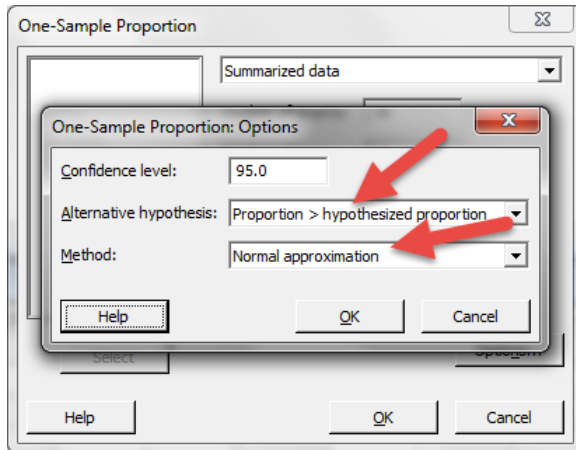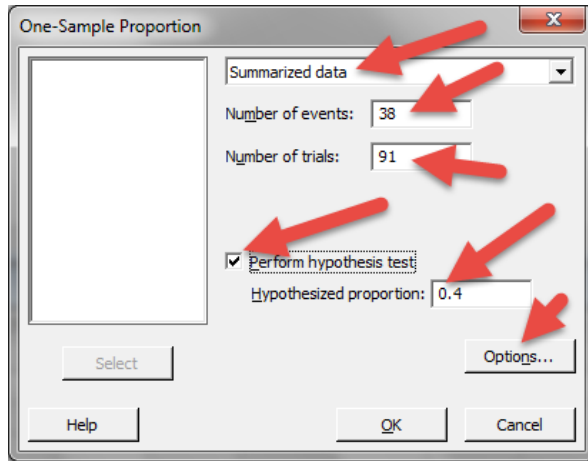
In our sample, we have 38 successes out of 91 trials.   This is summarized data.

On the following page, see how to test a hypothesis and how to form a large-sample confidence interval and a "plus-four" confidence interval.
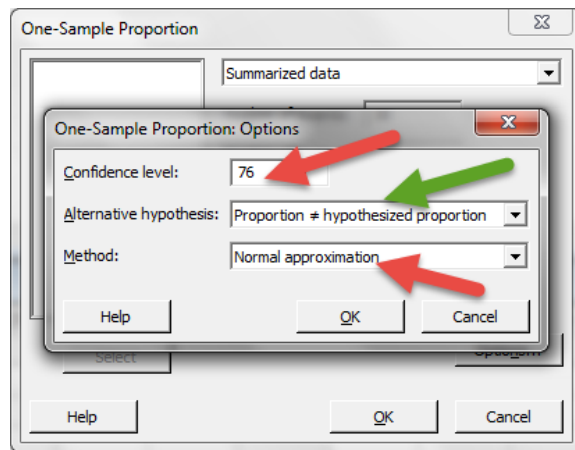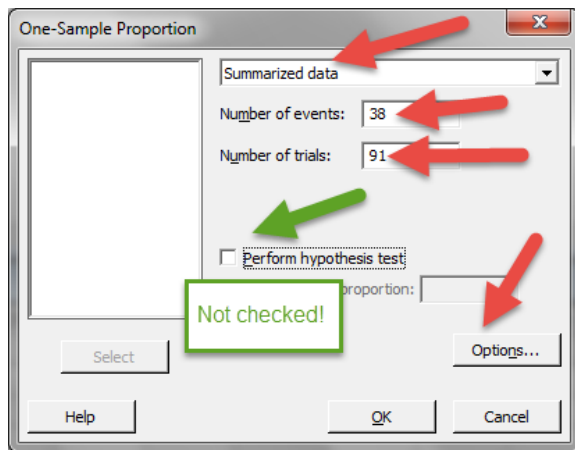
Note that, in this course, we always choose the "Normal approximation."

We will test Ho: $p = 0.40$ **versus Ha:** $p > 0.40$.

Form a 76% large-sample confidence interval for the population proportion.

The same dialog boxes are used to do a confidence interval.   But some different choices are entered.

 Form an 76% "plus-four" confidence interval for the population proportion.
Change the entries for the data: Enter 38 + 2 = 40 and 91 + 4 = 95