

CONFIDENCE INTERVALS USING THE T-DISTRIBUTION

CASIO CFX-9850GB PLUS INSTRUCTIONS

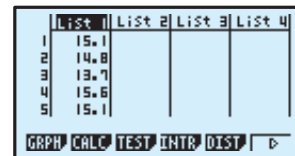
These instructions show how to calculate a confidence interval for the mean of a population from a sample.

The fat content (in grams) of 30 randomly selected pies at the local bakery was determined and recorded as:

15.1 14.8 13.7 15.6 15.1 16.1 16.6 17.4 16.1 13.9 17.5 15.7 16.2 16.6 15.1 12.9 17.4
16.5 13.2 14.0 17.2 17.3 16.1 16.5 16.7 16.8 17.2 17.6 17.3 14.7

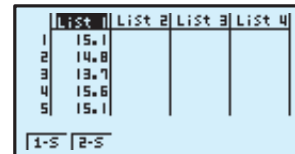
A 98% confidence interval for the average fat content of all pies made at this bakery can be calculated as follows:

Step 1: Choose the **Stat** menu from the main menu and enter the above data into **List 1**.

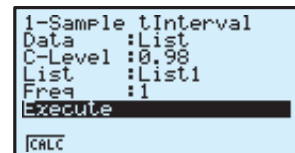


Step 2: Press **F4** to select the **INTR** menu, then **F2** to select **t**.

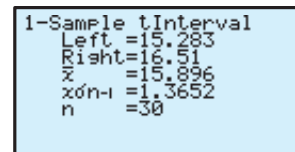
Finally, press **F1** to select **1-S**.



Step 3: Set up the screen as shown to calculate the 98% confidence interval.



Step 4: Press **F1** to calculate the confidence interval.



So, we are 98% confident that the average fat content of all pies made at this bakery lies between 15.283 and 16.51 grams.