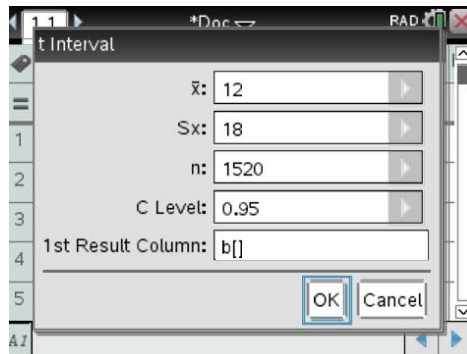


19. One-sample t intervals for μ on the calculator

Confidence intervals for a population mean using t procedures can be constructed on the TI-Nspire, thus avoiding the use of Table B. Here is a brief summary of the techniques when you only have numerical summaries and when you have the actual data values.

1. Using summary statistics: More books example, page 535

- Insert a *Lists & Spreadsheet* page: Press **(ctrl)** **[I]** and select *Add Lists & Spreadsheet*.
- Press **(menu)** \rightarrow *Statistics* \rightarrow *Confidence Intervals* \rightarrow t interval.
- The first dialogue box that appears asks for *Data* or *Stats* in the drop-down box. Select *Stats*, **(tab)** to **[OK]**, and press **(enter)**.
- In the next dialogue box, enter the values shown.



- **(tab)** to **[OK]** and press **(enter)**.
- The results should now appear in the spreadsheet.

	A	B	C	D
=			=tInterval(
1		Title	t Interva...	
2		CLower	11.0944	
3		CUpper	12.9056	
4		\bar{x}	12.	
5		ME	0.905618	
C1	="t Interval"			

2. Using raw data: Video screen tension example, page 536

Enter the 20 video screen tension readings data using the procedure below.

- Insert a *Lists & Spreadsheet* page: Press **(ctrl)** **[I]** and select *Add Lists & Spreadsheet*.

Name the first column **screen**.

Arrow down to the first cell and enter the 20 values.

	A	B	C	D
1	269.5			
2	297			
3	269.6			
4	283.3			
5	304.8			
A1	269.5			

To construct the t interval:

Press **(menu)** → *Statistics* → *Confidence Intervals* → t interval.

The first dialogue box that appears asks for *Data* or *Stats* in the drop-down box.

Select *Data*, **(tab)** to **OK**, and press **(enter)**.

In the next dialogue box, select the data list, **screen**, **(tab)** to **OK**, and press **(enter)**.

	A	B	C	D
1				
2				
3				
4				
5				
A1	269.5			

The results should now appear in the spreadsheet. (You may have to scroll up to see them.)

	A	B	C	D
1	269.5	Title	t Interva...	
2	297	CLower	292.32	
3	269.6	CUpper	320.32	
4	283.3	\bar{x}	306.32	
5	304.8	ME	14.0002	
C1		="t Interval"		