

# Confidence Intervals 2-P type.

*This resource was written by Derek Smith with the support of CASIO New Zealand. It may be freely distributed but remains the intellectual property of the author and CASIO.*

[N.B. This worksheet is for the CFX9850 GB Plus, FX9750 G Plus and the Algebra 2.0 graphic calculators only.]

Select STAT mode from the main menu by using the arrow keys to highlight the STAT icon or pressing 2.



**Example:** Consider the following collected statistics. Two samples were taken. Test at the 95% confidence level, to see if there is a statistical difference between the worm lengths of two samples.

Sample 1	Sample 2
n = 61	n = 62
Mean = 49	Mean = 38

**Answer:** Enter into the statistics icon. Choose **INTR F4**, then **F2** for **Z score**.

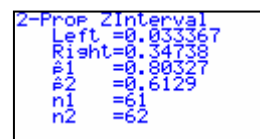
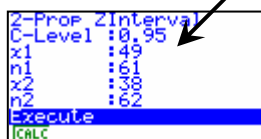


You now have a choice of 4 different options of confidence intervals. 1-S, 2-S, 1-P, and 2-P. This problem is a 2-S. So, press **F4**.

You will see the following screen, enter in the summary statistics and then either press **F1** or **EXE** for the calculation to be completed.



C-level is at the 95% level, enter 0.95



This gives the interval  $[-0.033367, 0.34738]$ , hence there **IS** a statistical difference between the two samples as 0 is **NOT** in this interval.

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