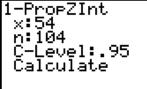
Confidence Intervals

It should come as no surprise that your calculator can calculate a confidence interval for a population proportion. Remember the Las Redas seafans example? Of the 104 seafans, 54 were diseased. To find the resulting confidence interval...

EDIT CALC MESME 8†TInterval… 9:2-SampZInt… 0:2-SampTInt… 10:2-PropZInt… B:2-PropZInt… C:X2-Test… D↓X2GOF-Test…



-PropZInt (.42321,.61525) ¢=.5192307692 n=104

STAT

TESTS (Most of the options found here will be used in the coming chapters.)

We're using a Normal model to find a confidence interval for a proportion based on *one sample*. So scroll down to **A:1-PropZInt**.

Enter the number of success observed and the sample size.

Enter the confidence level you're looking for and then **Calculate**.

There it is! In addition to calculating the confidence interval (42% to 62%), the calculator has also figured out the sample proportion, 52%.

1-PropZInt x:.72*145 n:145 C-Level:.95 Calculate **BEWARE!** The value you enter for **x** (the number of success), must be a *whole number*. If you are given a percentage of successes in the question (say...72% of 145), you must calculate the whole-number of successes you wish to find and round accordingly.

ERR∶DOMAIN ∭BQuit

Otherwise, you will get an **ERR:DOMAIN** message. \otimes