

29. TECHNOLOGY CORNER

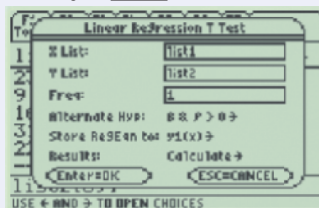
SIGNIFICANCE TEST FOR SLOPE ON THE CALCULATOR

TI-Nspire instructions in Appendix B; HP Prime instructions on the book's Web site.

Let's use the data from the crying and IQ study to perform a significance test for the slope of the population regression line on the TI-89. Enter the x-values (crying count) into L1/list1 and the y-values (IQ score) into L2/list2.

TI-89

- Press $\boxed{2\text{nd}} \boxed{F1} \boxed{[F6]}$ and choose LinRegTTest. . . .
- In the LinRegTTest screen, adjust the inputs as shown and press $\boxed{\text{ENTER}}$.



- The linear regression t test results take two screens to present. We show only the first screen.



AP[®] EXAM TIP The formula for the test statistic in a t test for the slope of a population (true) regression line often leads to calculation errors by students. As a result, we recommend using the calculator's LinRegTTest feature to perform calculations on the AP[®] exam. Be sure to name the procedure (t test for slope) and to report the test statistic ($t = 3.065$), P -value (0.002), and df (36) as part of the "Do" step.