

## 23. TECHNOLOGY CORNER

# TWO-SAMPLE $t$ INTERVALS ON THE CALCULATOR

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

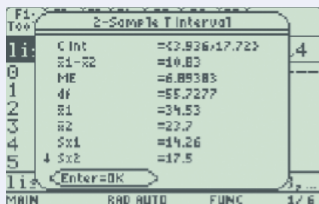
You can use the two-sample  $t$  interval command on the TI-89 to construct a confidence interval for the difference between two means. We'll show you the steps using the summary statistics from the pine trees example.

### TI-89

- Press **[STAT]**, then choose TESTS and 2-SampTInt....
- Press **[2nd]** **[F2]** ([F7]) Ints and choose 2-SampTInt....
- Choose Stats as the input method and enter the summary statistics as shown.



- Enter the confidence level: C-level: .90. For Pooled: choose "No." We'll discuss pooling later.
- Highlight Calculate and press **[ENTER]**.



**AP® EXAM TIP** The formula for the two-sample  $t$  interval for  $\mu_1 - \mu_2$  often leads to calculation errors by students. As a result, we recommend using the calculator's 2-SampTInt feature to compute the confidence interval on the AP® exam. Be sure to name the procedure (two-sample  $t$  interval) and to give the interval (3.9362, 17.724) and df (55.728) as part of the "Do" step.