

16. TECHNOLOGY CORNER

INVERSE t ON THE CALCULATOR

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

Most newer TI-89 calculators allow you to find critical values t^* using the inverse t command. As with the calculator's inverse Normal command, you have to enter the *area to the left* of the desired critical value. Let's use the inverse t command to find the critical values in parts (a) and (b) of the example.

TI-89

- In the Statistics/List Editor, press **[F5]**, choose Inverse and Inverse t....
- For part (a), enter Area: .025 and Deg of Freedom, df: 11, and then press **[ENTER]**.
- For part (b), use Area:.05 and df: 47.

F1-	F2-	F3-	F4-	F5-	F6-	F7-
Toe=1	Plot	Log	Exp	Invs	Invs	Invs
11				Inverse t...		
34				Inverse	=2.20099	
36				Area	=.025	
25				df	=11	
25				Enter=OK		
32						
15.8	5				756.78	
MAIN	SAD AUTO			FUNC	2/2	

F1-	F2-	F3-	F4-	F5-	F6-	F7-
Toe=1	Plot	Log	Exp	Invs	Invs	Invs
11				Inverse t...		
34				Inverse	=1.67793	
36				Area	=.05	
25				df	=47	
25				Enter=OK		
32						
15.8	5				756.78	
MAIN	SAD AUTO			FUNC	2/2	

Note that the t critical values are $t^* = 2.201$ and $t^* = 1.678$, respectively.