T-Intervals in SPSS

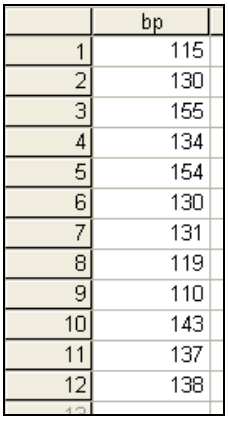
STAT 314

Average systolic blood pressure of a normal male is supposed to be about 129. Measurements of systolic blood pressure on a sample of 12 adult males from a community whose dietary habits are suspected of causing high blood pressure are listed below:

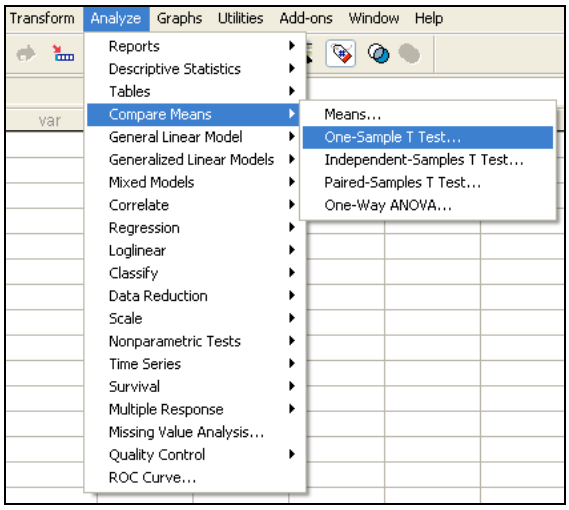
115	134	131	143
130	154	119	137
155	130	110	138

Compute a 95% confidence interval for the mean systolic blood pressure for adult males from this area.

1. Enter the values into a variable *(see left figure, below)*.

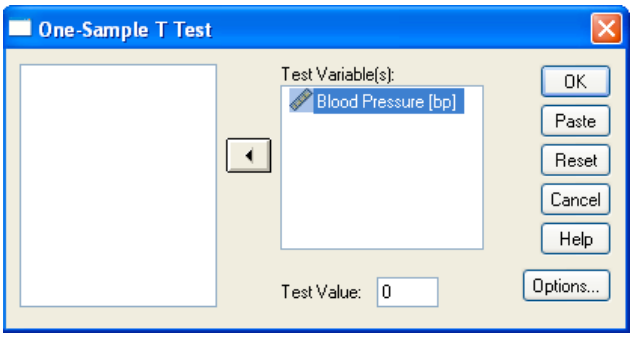


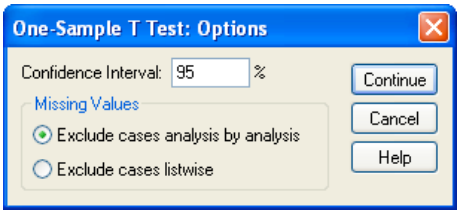
	bp
1	115
2	130
3	155
4	134
5	154
6	130
7	131
8	119
9	110
10	143
11	137
12	138



2. Select Analyze → Compare Means → One-Sample T Test… *(see right figure, above)*.

3. Select "Blood Pressure" as the test variable and enter "0" as the test value. Click the "Options…" button and enter the appropriate confidence level (95%). Click "Continue" to close the options and then click "OK". *(See the two figures, below.)*





4. Your output should look like this.

T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Blood Pressure	12	133.00	13.941	4.025

One-Sample Test

	Test Value = 0					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Blood Pressure	33.047	11	.000	133.000	124.1420	141.8580

5. You should use the output information in the following manner to answer the question.

"We are 95% confident that the mean systolic blood pressure for adult males from this area is somewhere between 124.1420 and 141.8580 beats-per-minute."