

Alg Stats 2.2b

Testing Batteries

- How long do your flashlight batteries last?
- Which battery brand is better?
- How could you devise a test for finding the better batteries?

1) Compare the following data for two different brand batteries. Organize the data so you can examine the differences. You might use any or all of the following: stem and leaf plots, box plots, histograms, measures of central tendency, quartiles etc.

You may also use calculators.

Battery Life Measured in Hours

Always Ready Batteries				Tough Cell Batteries			
96	116	114	110	101	140	98	88
115	175	19	84	91	130	110	95
106	117	86	52	104	86	110	91
115	92	203	107	84	100	96	102
44	31	111	89	103	95	99	115
110	105	95	93	121	121	107	112
115	22	86	101	107	121	114	105
113	96	63	101	97	110	111	109
74	110	110	105	103	110	106	97
115	115	111	99	115	108	103	94

2) Use the space below for your data organization, plots etc. Be certain to label well. If you need extra space, use extra paper. After you organize the data and create plots, respond to the following questions. Use your plots to help in your response.

- Which brand of batteries does seem to be better?
- Can you be certain your data and conclusions are correct? Would you stake your life on your choice? If so, why? If not, when would you? (Sometimes batteries are a matter of life and death.)