Lesson 4: Describing Quantitative Data; Center & Spread

Homework

Solutions

Please note that the steps show rounded numbers, but that the final answers to the problems are calculated without rounding.

Problem	Part	Solution
1	-	The standard deviation is a measure of how spread out the data are. A larger standard deviation indicates that data are more spread out and less consistent than data that have a smaller standard deviation.
2	-	Box Plot C
3	-	\$105,986.70
4	-	c. The percentage of data is the same for both.
5	-	4 hours
6	-	14 hours
7	-	2 and 4 hours
8	-	There is not enough information to answer this question. We need the original data to make this determination.
9	-	28.5 nCi/L
10	-	-23.9 nCi/L
11	-	1777.5 nCi/L
12	-	$904.1(\text{ nCi/L})^2$
13	-	30.1 nCi/L
14	-	c. {0, 0, 10, 10}
15	-	b. The standard deviation will decrease.