

Daily Agenda

Learning Targets: I can represent data using frequency tables, dot plots, histograms, boxplots, and stem and leaf plots. I can calculate the mean, median, and mode. I can calculate percentiles of a data set. I can determine an outlier. I can describe the center, spread, and shape from a visual representation of data. I can define standard deviation. I can find the standard deviation.

Homework

10.5 to 10.6 Review WS

Assessments

10.5 and 10.6 Quiz - 5/15  
Unit 10 B Test - 5/23

If you're not making mistakes, then you're not doing anything.  
-John Wooden

Nov 15-8:24 PM

Entering Data from Frequency Tables

Trees	3	4	5	6	7	8
Yards	1	5	7	4	1	2

3,4,4,4,4,4,5,5,5,5,5,5,  
6,6,6,6,7,8,8

- Enter data in list 1, Frequency in list 2
- Press the keys: STAT, arrow over and highlight CALC, ENTER
  - Choose 1: 1-Var Stats
  - Type L1 (2<sup>nd</sup> 1), L2 (2<sup>nd</sup> 2)

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1-Var Stats
x̄=5.25
s=1.69
Σx=58.5
Σx²=585
Sx=1.32784975
sx=1.299638106
L1=2
MIN=3
Q1=4
Med=5
Q3=6
maxX=8
    
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Apr 22-6:26 AM

Calculating Standard Deviation

Symbol	Standard Deviation	Formula
$\sigma$ <i>lowercase sigma</i>	Population	$\sigma = \sqrt{\frac{\sum(x - \bar{x})^2}{n}}$
$S$	Sample	$s = \sqrt{\frac{\sum(x - \bar{x})^2}{n - 1}}$

Apr 20-9:09 PM

Example 1: Find the standard deviation of the data set:

6.9 8.7 7.6 4.8 9.0

Pop.

x	$\bar{x}$	$x - \bar{x}$	$(x - \bar{x})^2$
6.9	7.4	-0.5	0.25
8.7	7.4	1.3	1.69
7.6	7.4	0.2	0.04
4.8	7.4	-2.6	6.76
9.0	7.4	1.6	2.56
Sum:			11.3

3  
6.9  
8.7  
7.6  
4.8  
9.0  
37.0  
7.4 =  $\bar{x}$

Find the variance:  $\frac{\sum(x - \bar{x})^2}{n} = \frac{11.3}{5} = 2.26$

Find the standard deviation:  $\sqrt{\text{var.}} = 1.503 = \sigma$

May 12-11:44 AM