

Reteaching Page

6.9 Stem-and-Leaf Plots

Stem-and-Leaf Plots are a good way to quickly organize a data set. Let's see how a stem-and-leaf plot can be used to help us stay on top of a problem.

Test Scores			
90	69	90	88
88	99	81	72

Here is a sample group of test scores from the second nine weeks. We are going to organize this data using a stem-and-leaf plot so that the various averages will be easier to calculate.

Step 1 – Create a stem-and-leaf plot.

Step 2 – Our data has numbers from the sixties through the 90's, so I will put the stems 6, 7, 8 and 9 on the plot.

Step 3 – Now add the numbers – placing the ones digit in the correct row.

Write 0 in the nine row to make 90.

Write 9 in the six row to make 69.

Write 0 in the nine row to make 90.

And so on until the number of leaves matches the number of pieces of data in the original set.

Step 4 – Rewrite the rows so that the leaves are in order from least to greatest.

Now that we have created a stem-and-leaf plot we can easily find each of the following information.

Stems	Leaves	_____ least value	Mean _____
6	9, 9	_____ greatest value	Median _____
7	2	_____ Range	Mode _____
8	1, 8, 8		
9	0, 0		

Least value will be the first leaf. (69)

Greatest value will be the last leaf. (90)

Range is Greatest Value – Least Value (90 – 69 = 21)

Mean – add all values and divide by the number of addends.

Median – The middle values are 81 and 88 – Their mean is the median.

Mode – 69, 88 and 90 occur the most often.

Stems	Leaves
6	
7	
8	
9	

Stems	Leaves
6	9, 9
7	2
8	8, 8, 1
9	0, 0

Stems	Leaves
6	9, 9
7	2
8	1, 8, 8
9	0, 0

$$88 + 81 = 169$$

$$169 \div 2 = 84.5$$