

**Math I Study Guide  
Probability**

**CAN I:**

- Making inferences about a population using statistics from a sample
- Use an inference to estimate a population mean
- Simulate a random sampling process
- Solve problems involving box plots and mean absolute deviation
- Make conclusions and solve word problems involving stem and leaf plots

Mean, Median, Mode, and Range			
First, arrange the numbers in order by size. Example: 3, 5, 5, 6, 8, 10, 12			
<b>Mean</b> the average of the numbers	<b>Median</b> the middle number of a sequence	<b>Mode</b> the number that occurs most often	<b>Range</b> the difference between the lowest and highest values
1. Add the numbers together. 2. Divide by how many numbers were added. Example: 3, 5, 5, 6, 8, 10, 12 Sum: 50 50 ÷ 7 = 7.14 The mean is 7.14	The median is the middle number when the numbers are arranged in order by size. For an even number of numbers, the median is the average of the two numbers in the middle. Example: 3, 5, 5, 6, 8, 10, 12 The median is 6.	Find the number(s) that occur most often in the sequence (there may be more than one). Example: 3, 5, 5, 6, 8, 10, 12 There are two 5s and one of each of the other numbers. The mode is 5.	Subtract the lowest number from the highest number. Example: 3, 5, 5, 6, 8, 10, 12 12 - 3 = 9 The range is 9.

\_\_\_\_\_ 1. The following vocabulary terms will be discussed during your course of study this week **range, quartile, stem-and-leaf plot, box and whisker plot, mean absolute deviation, population, sample, sample size, random sample, unbiased/biased, inference**

**Week 29 (April 6 - April 10)**

Complete the following homework activities (you will also have time to work on these activities during class):

- \_\_\_\_\_ 2. **Monday Night Homework:** Math Book 9.2 Problems 1-9 Odd Pg. 200  
And 9.3 1-15 Odd Pg. 210-211
- \_\_\_\_\_ 3. **Tuesday Night Homework:** Khan Academy Simple Probability
- \_\_\_\_\_ 4. **Wednesday Night Homework:** Math Book 9.4 Problems 2-14 Even Pg 220 AND  
9.5 Problems 1-15 Odd Pg. 232
- \_\_\_\_\_ 5. **Thursday Night Homework:** Khan Academy Making inferences from random samples AND Comparing Populations

Complete the following in class:

- \_\_\_\_\_ 1. Math Journal Entries
- \_\_\_\_\_ 2. Vocabulary
- \_\_\_\_\_ 3. In Class Activities

**Please turn in all work on dates listed. Anything not turned in gets no credit.**

If you ever need extra help on any concepts please come see me before school or during lunch on Mondays, Tuesdays, or Wednesdays. You are also welcome to come after school on Mondays.