Mean, Median, Mode and Range

**Mean** –

Examples:  
1. Matthew’s test grades are 80, 92, 85, 91, and 88. Find the mean of his grades.

2. To qualify for a donut eating competition, Sally must average eating 15 donuts in 10 minutes. In her practice trials Sally ate 16, 12, 15, 15, 11, and 13. What is the mean of donuts Sally eats? Can she enter the competition?

**Median** –

Examples:

1. Find the median for the given set of numbers 3, 7, 9, 8, 4, 6, 2, 7, 9, 10, 6.

2. Find the median weight of the textbooks in a student’s locker: 12, 14, 16, 18, 18, 20.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mode** –  1. Find the mode of the following set of numbers given the frequency table.   |  |  | | --- | --- | | Shoe Size | Frequency | | 8 | 2 | | 9 | 5 | | 10 | 3 | | 11 | 4 | | **Range** –  1. Find the range of the following set of numbers given the stem-and-leaf plot.  4 0 1 3 7  5 2 9  6 0 4 5 4|1 = 41 |

Let’s put it all together….

Mr. Falci and some other teachers played in an 18-hole golf tournament. The scores are listed below.

82, 89, 87, 86, 88, 83, 120, 89

mean\_\_\_\_\_\_\_\_\_ median\_\_\_\_\_\_\_\_\_ mode\_\_\_\_\_\_\_\_\_ range\_\_\_\_\_\_\_\_\_

**True or False?**

1. mean > median \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. median < mode \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. mode = range \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. mode > mean ­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Measure of Central Tendency**

Which measure of central tendency best represents the golf score for the teachers? Why?

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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

OH NO!! Am I really going to FAIL Algebra!?!?! Let’s find out!

1. If you need a final average of 65, and your first 3 quarter grades are 74, 52, and 64, what does your final quarter grade have to be to pass?

2. My mom will kill me if I have lower than an 80 on my report card. My test grades are 81, 79, 85, 76, and 68. What do I need on my last test to have an 80 average?

Practice 1-6 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Mr. Falci and Mr. Burke asked the students in their Algebra classes how many minutes a night they spent on math homework. The data is show in the frequency tables.

Mr. Falci’s Class Mr. Burke’s Class

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Minutes | Frequency |  | Minutes | Frequency |
| 5 | 1 |  | 5 | 3 |
| 15 | 2 |  | 15 | 6 |
| 20 | 8 |  | 20 | 4 |
| 90 | 2 |  | 25 | 2 |

List the data from the frequency table in order from *least to greatest* for **Mr. Falci’s class.**

List the data from the frequency table in order from *least to greatest* for **Mr. Burke’s class.**

|  |  |
| --- | --- |
| Mr. Falci’s Class  Mean - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Median - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Mode - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Range - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Mr. Burke’s Class  Mean - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Median - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Mode - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Range - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Which measure of central tendency best represents Mr. Falci’s data \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which measure of central tendency best represents Mr. Burke’s data \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which teacher’s class do you say spends more time on their homework? Explain.

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