

- CCSS: 6.NS.2 and 6.SP.5.C
- Learning Objective: Mean, Median, Mode, and Range

- Academic Vocabulary:
- Lower Quartile
 - Upper Quartile
 - Interquartile Range
 - Minimum
 - Maximum
 - Outlier

➤ Examples:

<p>1. Median (Q_2)</p> <p>Data Set = 2, 5, 13, 3, 7, 5, 4, 7 Reordered = 2, 3, 4, 5, 5, 7, 7, 13</p> <p>Median = $(5 + 5) \div 2 = 5$</p>	<p>2. Lower Quartile (Q_1)</p> <p>Data Set = 2, 5, 13, 3, 7, 5, 4, 7 Reordered = 2, 3, 4, 5, 5, 7, 7, 13</p> <p>Find median of the lower half of numbers.</p> <p>New Data Set = 2,3,4,5</p> <p>Median = $(3 + 4) \div 2 = 3.5$</p> <p>Lower Quartile = 3.5</p>
<p>3. Upper Quartile (Q_3)</p> <p>Data Set = 2, 5, 13, 3, 7, 5, 4, 7 Reordered = 2, 3, 4, 5, 5, 7, 7, 13</p> <p>Find median of the upper half of numbers.</p> <p>New Data Set = 5,7,7,13</p> <p>Median = $(7 + 7) \div 2 = 7$</p> <p>Upper Quartile = 7</p>	<p>4. Interquartile Range</p> <p>Find the range between the upper quartile (Q_3) and lower quartile (Q_1).</p> <p>Data Set = 2, 5, 13, 3, 7, 5, 4, 7 Reordered = 2, 3, 4, 5, 5, 7, 7, 13</p> <p>Lower Quartile = 3.5 Upper Quartile = 7</p> <p>Interquartile Range = $(7 - 3.5) = 3.5$</p>
<p>5. Minimum</p> <p>Data Set = 2, 5, 13, 3, 7, 5, 4, 7 Reordered = 2, 3, 4, 5, 5, 7, 7, 13</p> <p>The smallest number in a data set. Minimum = 2</p>	<p>6. Maximum</p> <p>Data Set = 2, 5, 13, 3, 7, 5, 4, 7 Reordered = 2, 3, 4, 5, 5, 7, 7, 13</p> <p>The largest number in a data set. Maximum = 13</p>

<p>1. Mean</p> <p>Step 1: Find the sum of the data set.</p> <p>Step 2: Count the # of elements in data set.</p> <p>Step 3: Divide the sum by the # of elements.</p>	<p>2. Median</p> <p>Step 1: Put #'s in order from least to greatest.</p> <p>Step 2: Find the number in the middle.</p> <p>Step 3: If 2 #'s in middle, find the mean of the 2 #'s.</p>
<p>3. Mode</p> <p>Step 1: The number that occurs the most.</p>	<p>4. Range</p> <p>Step 1: Find the largest number.</p> <p>Step 2: Find the smallest number.</p> <p>Step 3: Subtract the smallest from the largest.</p>

➤ Practice:

1. Michael scored 93, 85, 77, 84, 85, 70, 66, and 64 on his test this year. Find his mean, median, mode, and range for his test scores. If you could choose what his final grade will be at the end of the semester by using the mean, median, or mode, what would you choose and justify why?

Justification:
