

# 3-3 Mean, Median, Mode

Questions/Main Ideas:	Notes:
Standards	US 1.2 Add, subtract, multiply divide decimals
What are the 3m's?	<p>mean, median, mode are a <u>measure of central tendency</u></p> <p>✓ a value that the data <u>tends</u> to lean towards.</p> <p><u>Data</u>: 2, 3, 4, 5, 8, 8, 12</p> <p><u>mean</u>: sum of data items divided by the number of items</p> <p>mean = <math>\frac{2+3+4+5+8+8+12}{7} = \frac{42}{7}</math></p> <p>mean = 6 (7) → there are seven data items.</p> <p><u>median</u> - the middle of a data set when the items are arranged from least to greatest</p> <p>2, 3, 4, 5, 8, 8, 12  3, 4, 5, 8, 8  4, 5, 8  (5) ← the median.</p> <p><u>if</u> even set of data then the median is the mean of the two middle numbers.</p>

~~Summary:~~ mode  
is the data item that occurs the most.

can have more than one mode or you can have no mode if no items repeat.



Questions/Main Ideas:	Notes:
	<p>Find mean, median, mode:</p> <p>5.6, 6.8, 1.2, 6.5, 7.9, 6.5</p> <p>mean = 5.8 median = 6.5 mode = 6.5</p>
	<p>which data item affected the mean?</p> <p>→ 1.2</p> <p>what did this item do?</p> <p>→ lowered the mean</p> <p>→ So would you use this as a measure of the central tendency?</p> <p>→ No; use the mode it is better representative of the data.</p>
<p>How does an outlier affect the data when measuring central tendency?</p>	<p>1.2 is an <u>outlier</u></p> <p>→ is a value that is either much higher or lower than the rest of the data items.</p>
<p>How do I know what measure to choose?</p> <p>Summary:</p>	<p>Most sometimes choose the mean, median, mode as the best measure.</p> <p><u>choose</u></p> <p><u>mode</u>: if most values occur close to it.</p> <p><u>mean</u>: if there are no outliers that significantly affect it</p> <p><u>median</u>: when there are outliers and the mode is not a good measure?</p>



Questions/Main Ideas:	Notes:				
What are the statistics for our class' height?	<del>height</del> P1 P2 P3	mean	median	mode	outliers
	→ <u>In cm</u>				
	<u>HW</u>				
	Pg 134-135 6, 13, 14, 15				
Summary:					