

STANDARD DEVIATION CONCEPT CHART

These data sets have small* standard deviations	What do you notice about the data sets?	Create two data sets with small standard deviations.
<p><i>2, 3, 3, 4, 5, 5, 6</i></p> <p><i>80, 82, 82, 84, 86, 88, 89, 90</i></p> <p><i>113, 114, 117, 118, 118, 119</i></p>		
These data sets have large* standard deviations	What do you notice about the data sets?	Create two data sets with large standard deviations.
<p><i>2, 22, 32, 45, 80</i></p> <p><i>42, 68, 79, 85, 102</i></p> <p><i>110, 225, 375, 560, 1002</i></p>		
Each of these data sets has a standard deviation of zero	What do you notice about the data sets?	Create two data sets with standard deviations of zero.
<p><i>2, 2, 2, 2, 2, 2, 2, 2</i></p> <p><i>85, 85, 85, 85, 85, 85</i></p> <p><i>121, 121, 121, 121, 121, 121</i></p>		

*relative

<p>What do the two data sets below have in common? What's different? Which has the larger standard deviation?</p>	<p>What do the two data sets below have in common? What's different?</p>
<p><i>1, 2, 3, 4, 5</i></p> <p><i>1, 1, 1, 5, 5</i></p>	<p><i>1, 2, 3, 4, 5</i></p> <p><i>6, 7, 8, 9, 10</i></p>
<p>Create 2 data sets that have the same means, but different standard deviations.</p>	<p>Create 2 data sets that have different means, but the same standard deviation.</p>
<p>Is it possible to create two data sets that have different ranges, but both have a standard deviation of zero? Justify your reasoning and give an example to support your answer.</p>	