

April 23, 2015 1<sup>st</sup>  
2<sup>nd</sup>

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## 4/23 - Mean, Median, Mode, Range, Quartiles and Interquartile Range

Definitions / how to find each:

<p><b>Mean</b> average</p> <hr/> <p>Add all the #'s then <math>\div</math> by how many there are</p>	<p><b>Median</b> the # in the middle of an ordered list</p>	<p><b>Mode</b> # that occurs the Most</p> <hr/> <p>Order the numbers</p>
<p><b>Range</b> Biggest # minus the smallest #</p>	<p><b>Quartiles</b> #'s that break the data into 4 equal parts</p>	<p><b>Interquartile Range</b> <math>Q3 - Q1</math> the range of the "box"</p>

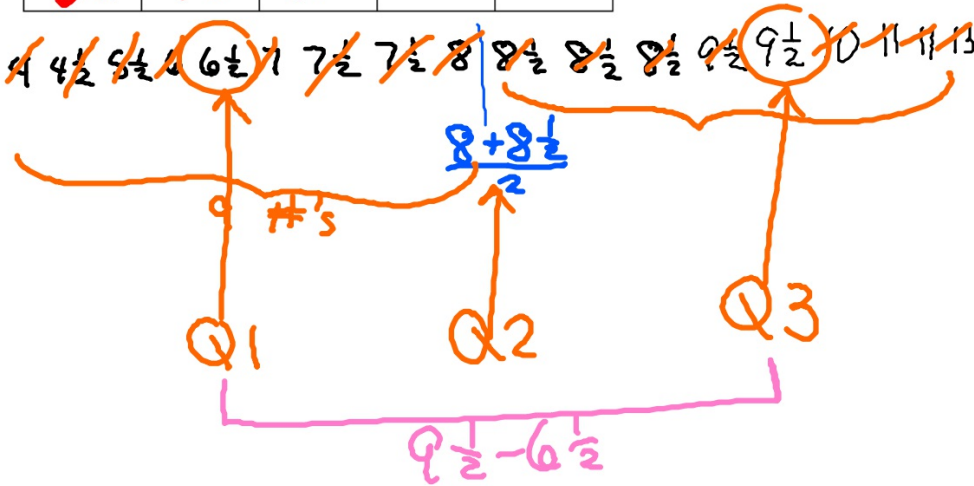
# First, you need some data!

Shoe size of the boys in class

13	6	8	$7\frac{1}{2}$	$9\frac{1}{2}$
$8\frac{1}{2}$	$8\frac{1}{2}$	$8\frac{1}{2}$	7	$7\frac{1}{2}$
$9\frac{1}{2}$	4	$4\frac{1}{2}$	11	$5\frac{1}{2}$
$6\frac{1}{2}$	10	11		

add all then  
÷ by 18 →  
halfway, ave. 2 #'s  
the one that  
happens the most

Mean	8.1
Median	8.25
Mode	8.5
Range	9
Quartile 1	6.5
Quartile 2	8.25
Quartile 3	9.5
Interquartile Range	3



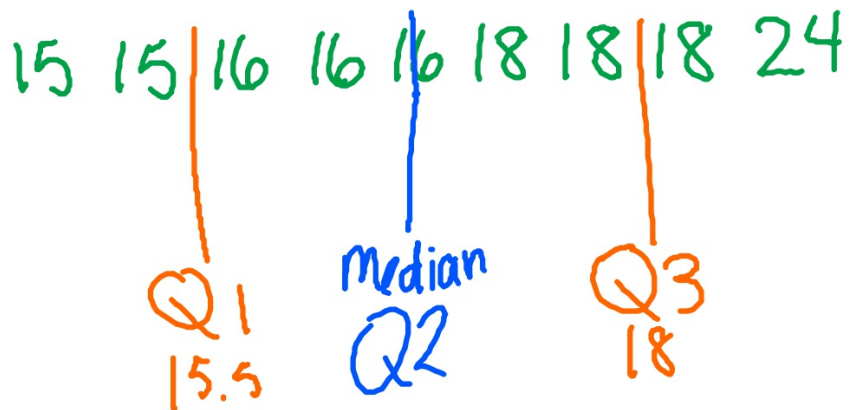
## Another one:

Mean	17.3
Median	16
Mode	16, 18
Range	9
Quartile 1	15.5
Quartile 2	16
Quartile 3	18
Interquartile Range	2.5

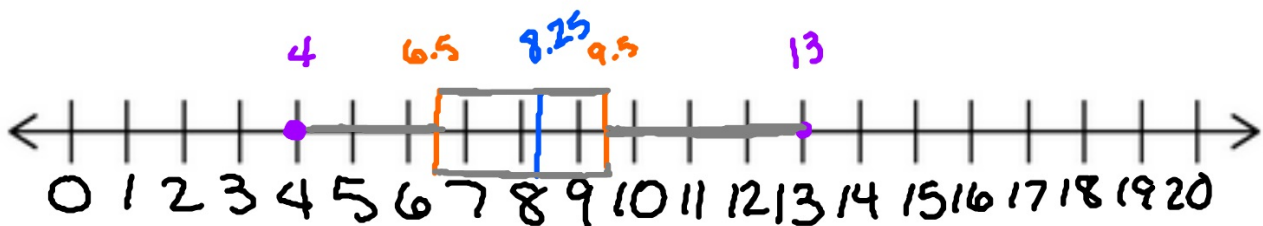
$18 - 15.5$

## Age of your oldest brother

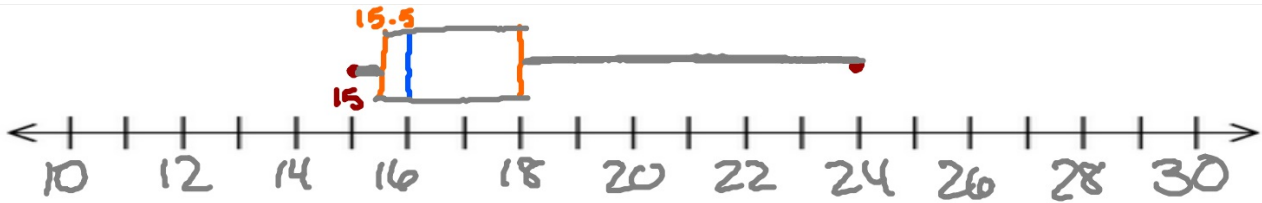
16	15	18	24	16
18	15	18	16	



Now, make a box-and-whisker graph with the results



Mean	8.1
Median	8.25
Mode	8.5
Range $13 - 4$	9
Quartile 1	6.5
Quartile 2	8.25
Quartile 3	9.5
Interquartile Range	3



Mean	17.3
Median	16
Mode	16, 18
Range	9
Quartile 1	15.5
Quartile 2	16
Quartile 3	18
Interquartile Range	2.5

$$18 - 15.5$$

Homework

Due