

# Frequently Asked Questions

**Q:** How do you use the mean and median to compare sets of data?

**A:** You can use the mean or median to compare sets of data. For example, the table shows the number of minutes two brothers talked during each phone call in a weekend.

The mean or median can be used to compare the number of minutes each brother talks.

The mean is calculated by adding all times and then dividing by the number of calls.

The mean times seem to show that Rufus usually talks longer than Cedric.

The median can be determined by locating the middle number after the numbers are placed in order.

The median times seem to show that Cedric usually talks longer than Rufus.

Because the time of 197 min is much different from Rufus's other times, his mean time is much greater than Cedric's mean time.

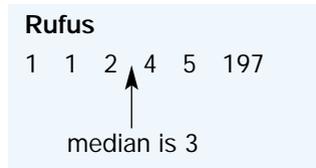
When the numbers are about the same in a set, you can use either the mean or median to compare sets. But if some numbers are quite different from the other numbers in a set, the median is sometimes a better choice.

**Q:** How do Carroll diagrams organize data?

**A:** A Carroll diagram organizes data that can be split into opposites. For example, this Carroll diagram compares the scores of 10 students on two math tests. The Carroll diagram shows there is a relationship between scores on the first math test and scores on the second math test.

Number of Minutes Talking		
<b>Cedric</b>		
20	30	20
25	15	30
23	22	13
<b>Rufus</b>		
1	5	1
4	2	197

	Total (min)	Number of calls
<b>Cedric</b>	198	9
<b>Rufus</b>	210	6
Mean time		
<b>Cedric</b>	$198 \div 9 = 22$	
<b>Rufus</b>	$210 \div 6 = 35$	



		Math Test 1	
		At or above the median	Below the median
Math Test 2	At or above the median	Denise, Akeem, Li Ming, Kurt	Tara
	Below the median	James	Marc, Chandra, Rodrigo, Angele