

## Gymnastics: Displaying and describing data — Name:



For some sports in the Olympics, such as diving and gymnastics, the highest and lowest scores given by 10 judges are dropped. Study the scores for these two gymnasts below.

Gymnast/Judge	1	2	3	4	5	6	7	8	9	10
1	9.3	9.2	9.0	8.9	9.1	9.2	9.0	8.5	10.0	9.6
2	10.0	8.8	9.3	7.1	9.2	9.1	9.8	9.4	9.5	9.3

**Question 1:** Display the data using a stem-and-leaf plot. Be sure to order the leaves from smallest to largest. Using pencil might help.

	Gymnast 1		Gymnast 2
7		7	
8		8	
9		9	
10		10	

**Question 2:** Find the mean and median for each set of 10 scores. Then, find the mean and median after dropping the highest and lowest scores for each gymnast.

Gymnast	Original data		After dropping high/low	
	Mean	Median	Mean	Median
1				
2				

**Question 3:** Which gymnast stands to benefit most by dropping the high and low scores?

**Question 4:** If the judging was done using the median instead of the mean would it be necessary to drop the high and low scores?