Box-and-Whisker Plot Challenge Questions

Make an argument for whether you agree or disagree with the following statements. PROVING SOMETHING IN MATH MEANS USING VALUES.

1. Given just the lowest and highest values, you are always able to determine the median. Why?

2. Given just the lowest and highest values, you will always be able to determine Q1 or Q3? WHy?

3. The mean for a set of data always falls within the "box"? (between Q1 and Q3). Prove your response.

4. Is there any way to tell what side of the median the mean will be located? WHy?