Sample Problems on Mean, Median and Mode

Situation A

There are three different basketball teams and each has played five games. You have each team's score from each of its games.

	Game 1	Game 2	Game 3	Game 4	Game 5
Jaguars	67	87	54	99	78
Wolves	85	90	44	80	46
Lions	32	101	65	88	55

1. Suppose you want to join one of the three basketball teams. You want to join the one that is doing the best so far. If you rank each team by their mean scores, which team would you join?

2. Instead of using mean scores, you use the median score of each team to make your decision. Which team do you join?

3. Pretend you are the coach of the Lions and you were being interviewed about your team for the local newspaper. Would it be better for you to report your mean score or your median score?

Situation B

You and your friends are comparing the number of times you have been to the movies in the past year. The following table illustrates how many times each person went to the movie theatre in each month.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
John	1	3	2	5	2	3	1	4	2	3	2	1
Mary	1	2	1	1	1	3	3	2	2	4	1	2
Brian	1	3	2	2	1	4	5	3	2	2	1	3
Kelly	2	2	1	1	3	2	4	1	3	2	3	2

1. By comparing modes, which person went to the movies the least per month?

2. By comparing medians, which person went to the movies the most per month?

3. Rank the friends in order of most movies seen to least movies seen by comparing their means.

4. Which month, by comparing the means of movies seen in each month, is the most popular movie-watching month?

5. By comparing medians, which month is the least popular month?

6. What is the mean of the medians for each month (the arithmetic average of the medians of the number of movies seen in each month)?