Due date : Aug 4, 2016

- 1) We want to estimate the number of fish in a pond. We cast our net and catch 50 fish, tag them and release them back into the water. The next day, we cast our net again and catch 40 fish out of which 10 have tags. What is the estimate for the number of fish in the pond?
- 2) In the past year, the average score of women on a standardized test at a college went up. The average score of men at the college also went up. But the average score of all students at the college went down. Is this possible? Explain.
- 3) A student received the following quiz grades: 72, 84, 61, 95, 92, 98, 87, 84. Compute the students mean quiz grade and the median quiz grade. If on the next quiz the student earns an 80, will the mean go up or down? What about the median?
- 4) Give an example of a data set where the median is greater than the mean.
- 5) Suppose 60 students out of 200 cheated during the last year, and you used the two-coin method to survey those 200 students. How many students would you expect to answer yes and how many no?