CSC 402 Requirements Engineering Midterm Questions.

This is a list of 4 midterm questions. I will ask you to answer 2 of them (or a new combination of any number of them in the form of 2 questions) during class next week. I ask that you spend a maximum of 4 hours outside of class in preparation for this exam. I particularly value analysis that is linked to your actual development experience in class and lab. Analysis is what is required for a good grade, mere anecdotal reporting, with nothing more, will not suffice. I will provide a maximum of 2 pages for you to answer each individual question in class, it must be legible, concise, simple and readable. I encourage you to outline your ideas and thoughts collaboratively in teams or across teams, but the final writeup will be an individual effort.

1.   Turner says to "test" every requirements statement by hypothesizing a few simple test cases that reasonably objective people might agree would verify the given requirement. He claims this will help improve the "quality" of the set of requirements derived. What are the strengths and weaknesses of this approach to requirements quality? (Think: What are the desired qualities of a set of requirements?)

2.   Dr. Fisher has these specification maxims:
         a.   "Nothing is obvious"
         b.   "Never trust the programmer"
Discuss these maxims and their relevance to our work on the Trimble project.

3.   Define the term "software requirement" (and any important terms you use in the definition.) What are the strengths and weaknesses of the definition you present?

4.   Some requirements are stated in the "positive" ("the system shall ...") and some are stated in the "negative" ("the system shall not ...."). Can you classify requirements that must be stated in the negative? What are the problems that arise as a result of the negative statement of a requirement?