405 Sample exam questions.

The following questions were designed to have exactly one correct answer for each question. Read all of the alternatives before deciding on any particular one. Please note that on some questions if you decide that "two of the above are correct" you should indicate which two! There is no penalty for guessing and you should try to answer each question. There is no time limit (within reason). If you feel that a question is ambiguous please comment on the test sheet. Work carefully.

1) A professor is considering two exams. One has thirty items, the other has an additional ten items. The additional ten items are easy enough that all the students can pass them. That is, there will be no variance on those items. Given these two tests, which of the following statements are correct:
   a) the mean score will be higher on the second (40 item) test than on the first (30 item) test.
   b) students will feel they did better on the second test because they will get more right.
   c) the second test will take longer.
   d) the variance of the two tests will be the same.
   e) the reliabilities of the two tests will be the same.
   f) the validities of the two tests will be the same.
   g) all of the above statements about this test are correct.

2) Cronbach's coefficient alpha is:
   a) the upper bound of the percentage of test variance that is common variance.
   b) the lower bound of the percentage of first factor variance.
   c) the mean of all split half reliabilities.
   d) all three of the above.
   e) only two of the above (specify which two).

3) You are considering several new tests to assess introversion/extraversion. Which of following tests would be the most reliable?
   a) a 5 item test with an average inter-item r of .4?
   b) a 20 item test with an average inter-item r of .3?
   c) a 40 item test with an average inter-item r of .2?
   d) a 80 item test with an average inter-item r of .1?
   e) a 100 item test with an average inter-item r of .0?

4) A new test of ability has a mean of 100, a standard deviation of 16 and a reliability of .81. A group of 100 students are given this test two times. If a person has a score of 140 on the first test, what do you expect him/her to get on the second test?
   a) 181
   b) 140
   c) 136
   d) 132
   e) 126
   f) 113