Name: _____

MAT 222
Spring 2019
Quiz 1

"It is possible to commit no mistakes and still lose. That is not a weakness; that is life."
  – Jean-Luc Picard, Star Trek: The Next Generation

Directions: For each of the following, place a mark in the blank to indicate the correct answer.

Problem 1: If something is statistically significant, it must have practical significance?

(a) _____ True

(b) _____ False

Problem 2: Analyzation of data should always begin with...

(a) _____ a computation of a confidence interval.

(b) _____ a hypothesis test.

(c) _____ graphically representing the data (whenever possible).

(d) _____ comparing all variables to look for correspondences.

Problem 3: Which of the following are problems when gathering data?

(a) _____ The difficulty in question design, e.g. loaded/leading questions, double barreled questions, absolutes, background/phrasing issues, etc..

(b) _____ The costs of performing even 'medium' sized studies.

(c) _____ The fact that even when there is correlation between variables, there may be confounding variables. Furthermore, there may not be a causation relationship.

(d) _____ All of the above.

Problem 4: Rejecting the null hypothesis when you should not is called...

(a) _____ a Type I error.

(b) _____ a Type II error.

(c) _____ the power of the test.

(d) _____ a whoopsie-daisy.

Problem 5: Which is generally more serious: a Type I error or a Type II error?

(a) _____ Type I

(b) _____ Type II