MS Module 4: Hypotheses and Test Procedures – homework assignment

(The attached PDF file has better formatting.)

Homework assignment:

Solve one of the following end of chapter problems, showing all work. The numerical answers are in the appendix to the textbook; for the homework assignment, show how the answer is derived.

- Problem 9, parts (c), (d), and (c) on page 427 (1st ed) / page 435 (2nd ed)
    - You must answer part (a) to solve parts (c), (d), and (e).
    - Part (b) asks for the explanation the text; you need not repeat this for the homework assignment.
    - Part (c) asks about the probability distribution of the test statistic, which depends on the test.
    - Part (d) shows that β (the probability of a Type II error) depends on the value of p.
    - For part (e), a conclusion is to reject or not reject the null hypothesis.
- Problem 17 on page 439 (1st ed) / page 447 (2nd ed)
    - Part (a) tests the basic concept of hypothesis testing.
    - Part (b) tests the formula for β.
    - Part (c) tests the formula for the needed sample size.
    - Part (d) tests the concept of a p value.