

Homework 8
MTH 1210, Fall 2019
Due Mon., Nov. 11

For each problem that involves computations, you must **show your work** to receive full credit. **Also, for all hypothesis testing problems:**

1. State H_0 and H_a in terms of μ
2. If α isn't explicitly given in the problem, use $\alpha = 0.05$.
3. Give the value of the test statistic (show your work).
4. Give the p-value. For the **one-mean z test**, obtain it from Table II. For the **one-mean t test**, obtain it from the table (handed out in class) that gives **areas to the right of t** under the t distribution curve.
5. State the conclusion (Reject H_0 or Fail to Reject H_0).
6. Interpret the result (in the context of the study described in the problem).

Read This Section in the Book:	Then Do These Problems:
12.1	12.51, 12.52
9.1	9.5, 9.15, 9.17, 9.19
9.3	9.52, 9.55, 9.56, 9.57, 9.58
9.4	9.83
9.5	9.107, 9.109, 9.111, 9.113, 9.116

Extra Credit Problems

This problem is worth **extra credit**, and can be handed in **any time** before the end of the semester. You must **show your work** to receive credit.

Section in Book	Extra Credit Problems
12.1	12.63* 2 extra credit points

* For Problem 12.63, Part *a*, “Without making any assumptions”, means you should use the “guess” $\hat{p}_g = 0.5$ in your sample size calculation. For Part *b*, use the “guess” $\hat{p}_g = 0.049$ (4.9%) in the sample size calculation.