

Homework 9
MTH 1210, Fall 2019
Originally due Wed., Nov. 20 (but can be handed in Mon., Dec. 2)

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:
10.1	No problems assigned from this section
10.3	10.79, 10.83
10.5	10.157*, 10.159** (skip part <i>a</i>)

* For **Problem 10.157**, the sample mean of the differences (Before minus After) is $\bar{d} = -7.26$ and the sample standard deviation of the differences is $s_d = 7.16$.

** For **Problem 10.159**, the sample mean of the differences (Normal minus Glaucoma) is $\bar{d} = 4.00$ and the sample standard deviation of the differences is $s_d = 10.74$.