

## ISyE 6739 – Group Activity 14

Names:

Group Number:

Use the following link and enter a number between 1 and 10 and your gender information in the spreadsheet.

<https://docs.google.com/spreadsheets/d/1yUligBN-g9eoRPWT6iV6PGCr28O2s0d6VJtwWsD3oZw/edit?usp=sharing>

**Problem 1.** Use a one-population proportion test to test whether the median of generated data is 5.

**Problem 2.** Test whether the proportion of even numbers depends on the gender or not. Find the p-value.

The waiting time of patients in different states can be found via

<https://projects.propublica.org/emergency/>

**Problem 3.** Georgia claims that it has a lower average (mean) emergency room waiting time compared with South Carolina. Use this dataset to test this hypothesis with the confidence of 95%. (Hint: You need to test the variance equality first).

**Problem 4.** Use the Georgia waiting time data to define and test a two- population hypothesis test.