**Lab 8 -- Math 58B: Island Exploration**

**The Islands Activity[[1]](#footnote-1)**

**Friday, March 24, 2023 – not due**



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| The goal of this activity is to familiarize yourself with the Islands, in preparation for beginning your group Island project. |

You may complete this activity either on your own or collaboratively with other people in the class. You do not need to work with the same people who will be in your Island project group.

Go to the Islands (<https://theislands.umn.edu/login.php>), click on ‘Need to set or reset your password?’, enter your 5C email address (most likely of the form aaaa20xx@mymail.pomona.edu), and the Islands will resend your password to you. Let me know if you can’t access the Islands.

Note: The Visitor Center on the Islands (click on the square just south of Arcadia) is a great source for information about the Islands.

For today’s lab, start by answering the even questions or the odd questions (or depending on who you are sitting with, one of you answer even, the other of you answer odd). Try to get through all of the questions in this hour, as this is your opportunity to really get to know the Islands (which will be the base of your final project in the class). After you’ve gone through half of the questions (evens or odds) individually, have a conversation with the people around you about what you found. You report on your set, others report on their set. Ideally, by the end of the hour, you will have a good sense of the Island population and what types of research can be done there.

**EXPLORING THE ISLANDERS**

1. List one personal characteristic of an Islander that you can obtain information about.

1. What do you have to obtain from an Islander before you can ask them to do a task or submit to a treatment or measurement?

1. List one interesting task or treatment it is possible to administer to study participants on the Islands.

1. List one interesting *response variable* it is possible to measure on study participants on the Islands.

1. List one characteristic which you can ascertain for an Islander in their story.

**EXPLORING THE ISLANDS**

1. What other things could you study on the Islands besides the Islanders themselves? (*Hint*: Click on some of the little squares.)

1. Find one of the halls on the Islands. Where did you find it? What information does it provide?
2. Find one of the schools on the Islands. Where did you find it? What information does it provide?

1. Find one of the universities on the Islands. Where did you find it? What information does it provide?

1. Find one of the bureaus on the Islands. Where did you find it? What information does it provide?
2. Find one of the health clinics on the Islands. Where did you find it? What information does it provide?

1. Find one of the hospitals on the Islands. (There are three hospitals, one on each Island.) Where did you find it? What information does it provide?

**CARRYING OUT STUDIES ON THE ISLANDS**

1. Describe an *experimental study* that you could do on the Islands. Describe the response variable, the treatment and the control. For one study participant, how long does it take to administer the treatment? How long does it take to measure the outcome?

1. Describe an *observational study* that you could do on the Islands. Describe the two characteristics you would measure. For one study participant, how long does it take to measure or obtain these two characteristics?

**SAMPLING ON THE ISLANDS**

1. Describe the Islands from the point of view of a researcher looking to obtain a representative random sample of Islanders for a research study. Obtain VERY ROUGH estimates for each of the following:

1. Roughly how many villages are there on the Islands?
2. Roughly how many houses are in each village?

1. Roughly how many people live in each house?

1. Briefly describe a method you could use to obtain a *simple random sample* of people who live on these Islands.

**TIME ON THE ISLANDS**

1. Go to the Visitor’s Center and read the “About Time” information. How does time work on the Islands? If you repeat a measurement on an Islander 10 minutes later in our time, how much time has passed on the Island? If you come back to the Islands tomorrow at the same time, how much time will have elapsed on the Islands? What about if you come back a week from now? A month? A year?

**PREVIOUS RESEARCH**

1. Go to the Academy. What is there? List one publication that has results which you think are interesting. Is the response variable quantitative or categorical? How many explanatory variables are there? Are they each quantitative or categorical? How many observational units total were collected in the study?

1. Thanks to Laura Le and Ann Brearley at UMN for sharing resources. Much of the assignment is taken directly from their excellent resources. [↑](#footnote-ref-1)