Mathematics 3810H – Ancient and Classical Mathematics
Trent University, Winter 2022
Assignment #5
Due on Friday, 18 March.

Please read through Archimedes' *The Sand Reckoner* , posted to Blackboard with this assignment, and answer the following questions.

1. Based on Archimedes' discussion just what did the Greeks of his time know about the solar system and how accurate was it? *[5]*

2. What exactly does Archimedes accomplish in this work, allowing for the state of astronomical knowledge at the time? *[1]*

3. How many grains of sand would it really take to fill the solar system, based on our modern knowledge of it? *[4]*

NOTE: The answer to the last question is a bit arbitrary, in that it depends on what you consider the bounds of the solar system to be, for which there are several reasonable candidates.