

## Mathematics 3810H – Ancient and Classical Mathematics

TRENT UNIVERSITY, Winter 2022

### Assignment #2

*Due on Friday, 4 February.*

Plimpton 322 is a cuneiform tablet with a table of numbers written on it. (Figure 2-1 on page 48 of the textbook is a picture of this tablet; there is a bit of discussion of it on page 63.) There are several theories as to what it really means, a couple of which are discussed in *Words and Pictures: New Light on Plimpton 322* by Eleanor Robson (*American Mathematical Monthly* **109** (2002), pp. 105–120). You can find this article in the JSTOR archive (which should be accessible via Bata Library) at: [www.jstor.org/stable/2695324](http://www.jstor.org/stable/2695324) (For more detail, you can also try *Neither Sherlock Holmes nor Babylon: a reassessment of Plimpton 322* by Eleanor Robson (*Historia Mathematica* **28** (2001), pp. 167–206).) (This journal should also be available via Bata Library.)

A new theory concerning the table of numbers on the tablet was proposed a few years ago in *Plimpton 322 is Babylonian exact sexagesimal trigonometry* by Daniel F. Mansfield and N.J. Wildberger. A draft of this paper can be found at :

[www.sciencedirect.com/science/article/pii/S0315086017300691](http://www.sciencedirect.com/science/article/pii/S0315086017300691)

1. Describe the major interpretations of Plimpton 322, as described in the two papers mentioned above. [4]
2. Summarize the arguments for and against each interpretation. [4]
3. In your opinion, which interpretation is most likely to be correct? Why or why not? [2]