TOPIC SURVEYS

MATH 300I-01, FALL 2017

1. What is to be done

For certain topics that we discuss during the semester, you are to write a survey on the topic. These surveys can be short — even cursory, since we've all read the material, but they should be written in prose (not merely bullet points or the like).

Your survey should include at least the following information:

(1) The Hilbert problem(s) under consideration, including definitions of terms
(2) Major precedent ideas that lead up to these problems, including (but not necessarily limited to)
    (a) People whose work before 1900 was important to the area
    (b) Some work before 1500 that was relevant to the problem
    (c) Some work relevant to the problem by people born outside the US, Canada, Europe, and Russia.
(3) What progress has been made toward solving the problem
(4) By whom was this progress made, and what were the life circumstances of those people?

Of course, sometimes the ancient work and the work outside the US, Canada, Europe, and Russia will only be "relevant" in a weak sense. Find some things about which you can explain *some* connection. The Merzbach and Boyer book will be helpful to you in this. Remarks on a person's life circumstances may include academic details, but must go beyond names, places, and dates.

2. Due Date

Your paper is to be turned in at the beginning of class on the first day that the topic is discussed. You must submit at least one paper reflecting the topics discussed in each of the following periods.

- August 25–September 1
- September 4–September 15
- September 18–September 29
- October 2–October 13
- October 16–October 27
- October 30–November 10
- November 13–November 27

Timeliness is critical on these papers, so no late credit will be given, although you may still submit a paper on another topic covered within the period. Each period is anticipated to have two topics.

3. GRADING

In addition to the usual criteria, I will assess the following content questions:

(1) Does the paper describe the Hilbert problem(s) under consideration, including definitions of terms?

(2) Does the paper describe major precedent ideas that lead up to these problems, including people whose work before 1900 was important to the area, some work before 1500 that was relevant to the problem, and some work relevant to the problem by people born outside the US, Canada, Europe, and Russia?

(3) Does the paper describe what progress has been made toward solving the problem, by whom was this progress made, and the life circumstances of those people, at a level that goes beyond names, places, and dates?