

Instructions: Do the reading, then go through the questions, think about them, referring back to the reading when necessary, and write short answers (ranging between 1-2 sentences and couple paragraphs) for each. (If you feel you addressed one question in an answer to another, feel free just to refer to that.) Turn in your answers on the day the reading is due. You may discuss these questions with others but all answers should be written in your words (though you may use occasional quotes).

To be turned in:

1. What are your overall thoughts on Chapter 18?
2. What are your overall thoughts on Chapter 19 or the whole book?
3. For a subsequent version of this course not directed at math majors, would you recommend using both Silver and Ellenberg again (possibly in reverse order)?
4. Let $P = \{1, 2, 3, \dots, 7\}$ and L be the set consisting of these 7 subsets of P : $\{1, 2, 4\}$, $\{1, 3, 5\}$, $\{1, 6, 7\}$, $\{2, 3, 6\}$, $\{2, 5, 7\}$, $\{3, 4, 7\}$, $\{4, 5, 6\}$. Call the elements of P points and the elements of L lines. Check that (i) any two points determine a unique line, (ii) any two lines intersect in a unique point. Which geometry in Chapter 18 is this similar to?
5. In your experience as a math major, have you felt that you need to “be a genius” to be good at math? If so, how did you convince yourself to be a math major?
6. Do you agree with the statement: *Genius is a thing that happens, not a kind of person?* Why or why not?
7. Does Ellenberg’s calculation of expected number of states Silver would get wrong in 2012 make sense? By a similar method, the expected number of states Silver’s final prediction for the 2016 presidential election would be wrong is about 4.62. In fact, Silver got 5 wrong. Does this information change your opinion of the “A man who swings from poll to poll” section?