

**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 6?
2. What are your overall thoughts on Chapter 7?
3. If Witztum et al indeed chose the names to test against the Torah in advance, is what McKay and Bar-Natan showed about another choice of names not being correlated evidence that the Witztum–Rips–Rosenberg paper was just a coincidence?
4. When discussing the “Dear Doctor” letter, which claims a pill doubles a thrombosis risk, Ellenberg says the results are significant in the sense of Fisher. Then Ellenberg says Fisher’s  $p$ -value test *merely counsels us about the existence of an effect but is silent about its size or importance*. Is this a contradiction or can these statements be reconciled?
5. Based on the discussion in Chapter 7, do you believe or not believe in the existence of hot hands in basketball? Can you think of better experimental design to test it?
6. The day before the 2014 World Cup (soccer, or maybe football), twitter account @FiFNdhs called “FIFA Corruption” made amazingly accurate posts on the winner, final score (1-0, in extra time) and what player would score the goal the next day. Does this suggest that game was determined in advance, or are there other plausible explanations?