Math 1100, sect 3. Quiz 4   **Print name:**_____

Pledge: *My answers are entirely my own work, based on my own reading.* Signed:_____

Instructions: Read the *New York Times Magazine* article "The Odds of That?" by Lisa Belkin and answer the following questions. There is a link to the article at `http://www.math.lsu.edu/courses/1100`

1) According to the article "The Odds of That," what is the true meaning of the word "coincidence"?

2) What does the "law of large nubers" say about unusual events?

3) There are 25 people in a doctor's waiting room. What is the better bet:
   • no two have a birthday on the same day;
   • among the 25, there are two with a birthday on the same day.
   Explain.

4) How do scientists explain the fact that humans overreact to coincidences?

5) Who is Amos Tversky and what did he do?

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6) Who is Ruma Falk and what did she do?

7) A reporter searches all records of childhood cancer deaths in Indiana during the last decade and finds that 3 children living on the same street in a mid-sized town died of leukemia in the same year. You are the editor of a major Indiana newspaper. Does this story make the front page? Why?

8) How has the web affected society's sensitivity to coincidence?

Unlike the previous questions, the last two may be matters of opinion, and they will be graded accordingly, i.e., a simple, supported statement of opinion will suffice.

9) What is the answer to the last question in the article? Explain.

10) Can a coincidence be *statistically significant*? Why or why not?