Do you remember all of these things?

- Basic set theory (union, intersection, complement, subset, disjoint).
- Events, random variables, distribution functions, outcome space, probability.
- Law of Equally Likely Outcomes.
- Counting with "options", eg. binary words, permutations, ...
- Birthday problem.
- Basic probability equalities.
  eg. if A and B are disjoint, $P(A \cup B) = P(A) + P(B)$.
- Binomial coefficients and Pascal's Relation: $\binom{n}{k} = \binom{n-1}{k-1} + \binom{n-1}{k}$.
- Binomial Theorem.
- Choosing colored balls from boxes.
  eg. What is the probability draw you draw one yellow ball and three red balls?
- Number of ways to stand in a line (permutations) and counting with order.
  eg. rearrangements of MISSISSIPPI, Alex and Barney in a line.
- Binomial distribution and Bernoulli trials process.
- Coin flipping and rolling dice problems.
  eg. Heads with probability .7; rolling dice until you get a 6; X the random variable counting number of heads.
- Independent events.
- Conditional probability.
- Application of conditional probability to diagnostic testing.
- Paradoxes and the Monty Hall Problem will not be on this quiz.