Stat 134: Section 6

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Conceptual Review

Please discuss these short questions with those around you in section. These problems are intended to highlight concepts from lecture that will be relevant for today's problems.

a. What is the formula for hypergeometric distribution?

Problem 1

You flip a fair coin 10 times, and I flip a fair coin 10 times. What's the probability that we get the same number of heads? Write your answer without a summation.

Hint: Write down your answer using summation first. Now how can you relate your summation to a hypergeometric distribution?

Problem 2

Draw five cards from a standard deck of cards to form a poker hand.
Let E be the event of having no point. Find P(E).

Instead of subtracting the sum of probabilities of getting points, try to think how you can approach this directly.

Hint: For a poker hand to receive no point, they have to be all singles, but not a straight or flush.

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