## MIT Poker Class Questions

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For these problems figure out what is optimal for both players, and what is the value of the game? Start thinking about these and we will solve them, time permitting.

Problem 1: Suppose the pot is $\$ 100$ and each player has $\$ 100$ left. $X$ draws a hole card from a shuffled deck. If it is a heart, $X$ wins otherwise $X$ loses. What is the optimal strategy for both players? This includes how Y should respond to say a bet of $\$ 50$.

Problem 2: Same as problem 1 except $X$ wins if the hole card is not a club.

Problem 3: In NL if the stack size is less than 3 BB , why does jam or fold apply?

Problem 4: Pot is $\$ 100, X$ and $Y$ both have $\$ 100$ behind. Only $X$ can go all in or check ( $Y$ is not allowed to bet). What is the optimal strategy for both players?

Problem 5: Same as 4 except both players may bet $\$ 100$.

Problem 6: Same as 4, except $X$ can bet any amount.

Problem 7, full NL game, both players can bet.

