

Name: _____

MATH230 Discussion Quiz 3

20 minutes, 10 points total, closed note, no calculators

1: Find the probability of the following. Simplify any fractions in your answer (**point distribution: 1, 1, 2, 2**)

a: Shuffle a standard card deck (no jokers). Probability 1st card is a King

b: Probability of getting the same number of heads and tails after flipping a fair coin 11 times

c: Roll 2 fair octahedral dice, each labeled 1-8, and take the sum of the results. Probability that the sum is odd

d: Roll 2 fair standard dice. Probability that the sum is above 8 if at least one of the dice landed on 6

2: A drawer has 5 black and 3 white socks. Socks are removed one by one randomly until two socks remain. What is the probability that the remaining socks are the same color? (**4 points**)