

Homework 8

Math 118 section 004

Due: Monday, March 21st

1. Consider the random experiment of rolling 2 dice. List the following events and find the probability that the event occurs.
 - (a) A total of 3 is rolled.
 - (b) A 4 is rolled.
 - (c) Neither a 3 or a 4 is rolled.
 - (d) The total on the dice is less than or equal to 4.

2. Your sock drawer has socks of 4 different colours: black, brown, grey and white. If you randomly pick two socks, find the probability that you get two matching socks.

3. In the Texas hold 'em version of poker, a player is dealt two cards face down. What is the probability that a person is dealt a pair?

4. A bookie has the odds on a particular horse winning a race as 2 to 9.
What is the probability that this horse wins the race?

5. Suppose that for some event E , $P(E) = \frac{3}{8}$. What are the odds against
this event occurring?

Bonus: If a person is dealt a 5 card draw poker hand (5 cards, face down), what is the probability that they are dealt one pair (just a pair)?