

HW #2

Please, write clearly and justify all your steps, to get proper credit for your work.

(1)[2 Pts] A bowl contains 7 blue chips and 3 red chips. Two chips are drawn successively and without replacement. Compute the probability that the first draw is a red chip and the second draw is a blue chip.

(2)[2 Pts] From a regular deck of 52 playing cards, cards are drawn successively and without replacement. Compute the probability that the third spade appears on the sixth draw.

(3)[6 Pts] Two cards are drawn successively and without replacement from a 52-card deck of playing cards. Compute the probability of drawing:

- (i) two hearts;
- (ii) a heart on the first draw, a club on the second draw;
- (iii) a heart on the first draw, an ace on the second draw.

(4)[8 Pts] Solve Problem 2.2.-10 (p.103) in Textbook.