Student Name:

Homework #3

<u>Instructions:</u> Prepare your deliverables in clean letter size printer-quality papers with a high-contrast pencil (engineering pads are also accepted). Attach this assignment sheet as cover page, show all your work, and <u>box all your solutions</u>. All Matlab code needs to be published, and <u>all figures needs to have proper axis labeling and legends</u>. Homework assignments will be collected during class time on the due date. *No late homework or submission that do not strictly follow the provided instructions will not be accepted.*

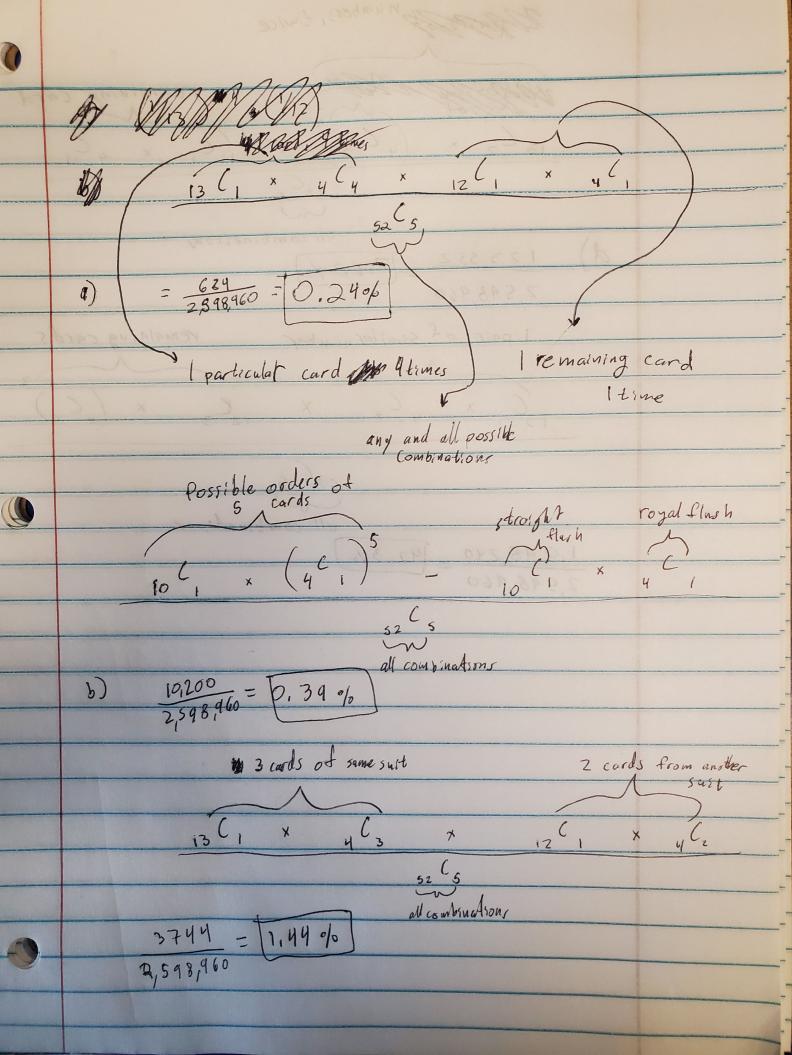
• Homework problems not to be graded

- o From textbook (Lathi):
 - Ch 2: 1.8, 2.11, 3.2, 4.2,

• Homework problems to be graded

A poker hand of 5 cards is randomly drawn from a standard size deck of 52 cards. Find the following probabilities and <u>justify your work:</u>

- a) Four of a kind (4 cards of the same denomination/face value)
- b) Straight (cards in "order," e.g., a 4, 5, 6, 7 and 8; ace can be high or low)
- c) Full house (3 of the same denomination, and 2 of another)
- d) Two pair (two of same denomination and two of another, but four of a kind)
- e) One pair (only two of the same denomination)



Pair of similar all combinations 123,552 = 7.62% 2,598,960 remaining cards I pair of similar number 2,598,960 of shill = hate