

Stat 230

May 13 Demo/ Practice problems

All the problems are ungraded.

Pr. 1 A digit is randomly chosen from 1,2,3,4,5 and then a second one is chosen from the remaining digits.

- a) What is the outcome space of this experiment?
- b) What is the probability that an odd digit will be chosen a) the first time b) the second time c) both times?

Pr. 2 Pitman 1.1.4

You can assume we are playing American roulette: 38 pockets, 18 of which are red, 18 are black, and 2 are green.

Pr. 3 Pitman 1.1 Problem 7

Pr. 4 If 3 balls are randomly drawn from a bowl containing 6 white and 5 black balls, what is the probability that one of the balls is white and the other two black?

Pr. 5 If 3 balls are drawn randomly from a bag containing 6 blue and 5 red balls, what is the probability of obtaining:

- a) Balls of both colors
- b) 2 red balls and a blue ball
- c) Just 3 red balls

Pr. 6 a) What is the probability of getting full house in poker?

- b) Assume you are playing a game where you dealt a poker hand. You win 500 dollars if you get a full house. If playing the game costs you \$1, should you play the game?

Pr.7 A box contains 20 identically shaped balls: 5 red, 5 green, 5 blue and 5 yellow. Ten balls are picked from the box (without replacement). What is the probability that at least one color is missing from the selection?