

HOMWORK ASSIGNMENT # 5

ASSIGNED: OCTOBER 22, 2009 DUE: OCTOBER 29, 2009

Show your work

- (1) The 'any seven' bet is that the next roll is a 7 and it pays 4:1 if the next roll is a 7 and the bettor loses otherwise. What is the expected value on a \$1 bet and what the house advantage of this bet?
- (2) The fields bet is that the next roll will be one of 2, 3, 4, 9, 10, 11, 12. Most casinos pay 2:1 on the 2 and 12 and 1:1 on 3,4,9,10,11. What is the expected value on a \$1 bet and what the house advantage of this bet? Some casinos pay 3:1 on the 2, 2:1 on the 12 and 1:1 on 3,4,9,10,11. What is the house advantage of this bet?
- (3) The Big 8 bet (and similarly the Big 6 bet) wins if the shooter rolls an 8 before a 7. The bet pays 1:1 if the 8 comes up before a 7 and the bet is lost if a 7 comes up before an 8. What is the expected value on a \$1 bet and what is the house advantage of this bet?
- (4) The 4-hardway bet wins if the shooter rolls a double-2 before a 7 or a 3+1 (a 4 the 'easy' way) is rolled. The bet pays 7:1 if the double-2 comes up first and loses if the 7 or 4 the easy way comes up first (in craps terminology the bet pays '8 for 1'). What is the expected value on a \$1 bet and what the house advantage of this bet?
- (5) The 6-hardway bet wins if the shooter rolls a double-3 before a 7 or a 4+2 or a 5+1 (a 6 the 'easy' way) is rolled. The bet pays 9:1 if the double-2 comes up first and loses if the 7 or 6 the easy way comes up first (in craps terminology the bet pays '10 for 1'). What is the expected value on a \$1 bet and what the house advantage of this bet?