

HOMWORK ASSIGNMENT # 1

ASSIGNED: SEPTEMBER 17, 2009 DUE: SEPTEMBER 24, 2009

For each of the roulette bets below find the probability of winning the bet, the probability of losing the bet and then calculate $(\textit{amount WIN}) \cdot (\textit{probability WIN}) - (\textit{amount LOSE}) \cdot (\textit{probability LOSE})$. Assume European roulette table i.e. no 00.

- (1) straight up (any single number) payout 35:1
- (2) split (two adjacent numbers) payout 17:1
- (3) street (three horizontal numbers) payout 11:1
- (4) corner (four adjoining numbers) payout 8:1
- (5) six line (six numbers from two adjacent rows) payout 5:1
- (6) column (12 numbers) payout 2:1
- (7) odd/even (18 numbers) payout 1:1

- (8) What does the number $(\textit{amount WIN}) \cdot (\textit{probability WIN}) - (\textit{amount LOSE}) \cdot (\textit{probability LOSE})$ that you calculated above represent? I am looking for an intuitive explanation of what this number tells you.