

4. A European roulette wheel has 37 sectors including a zero but no double zero. Furthermore, if zero comes up, any wager on an even money bet (red, odd, 2nd 18, etc.) remains for *one more spin*. If the desired even money event occurs on this next spin, the original wager is returned (no gain or loss).

(a) A bet placed on three numbers (for example, 10, 11, 12) pays 11 to 1. What is the house edge on this bet?

(b) What is the house edge on an even money bet?

5. What is the chance of being dealt three of a kind on the initial deal in poker (where you are dealt 5 cards)?