

Ppocket kings=1221 essays examples

[Psychology](#)



**ASSIGN
BUSTER**

- The probability of being dealt an ace is $\frac{4}{52}$. The probability of being dealt an ace again from the remaining pack of 51 cards is $\frac{3}{51}$. Therefore, the probability of a pocket ace hand will be given by $P_{\text{Pocket Aces}} = \frac{4}{52} \times \frac{3}{51} = \frac{12}{2706} \approx \frac{1}{225.5}$

- There are an equivalent number of kings as there are aces. It, therefore, implies that the odds of being dealt pocket kings are the same as that of being dealt pocket aces. The probability of a pocket kings hand is therefore

- There are 13 sets of cards with the same denomination in a set of playing cards. Therefore, from b., there are 13 possible pocket pairs. Therefore, the probability of having any pocket pair is the probability of a particular pocket pair times the number of possible pairs.

$$P_{\text{Any pocket pair}} = P_{\text{pocket pair}} \times 13 = \frac{1}{225.5} \times 13 = \frac{13}{225.5} \approx \frac{1}{17.3}$$

- The probability of a flop containing 1 card of the denomination of a pocket pair can be given by

$P_{\text{flop with at least same denominator}} = 1 - P_{\text{flop without similar denominator}}$
 the probability of picking the first flop card that is not similar to the pocket pair is $\frac{48}{50}$. On the second pick, the probability is $\frac{47}{49}$ and on the third pick it is $\frac{46}{48}$.

Therefore,

$$P_{\text{flop without similar denominator}} = \frac{48}{50} \times \frac{47}{49} \times \frac{46}{48} = \frac{108112}{1225}$$

$$P_{\text{flop with at least same denominator}} = 1 - \frac{108112}{1225} = \frac{144113}{1225}$$

- The probability of a flop that gives you " trips" can be calculated bearing in mind that the chances of picking a card similar to the one in hand is $\frac{1}{50}$, picking a second card different from this one, after making this pick, has a probability of $\frac{1}{49}$. The last pick will have a probability of $\frac{1}{48}$. Because,

there are three cards that would form a pair with the one picked (with a probability of 250) and the remaining card from your pocket pair denomination that has a 148 chance of being included in the flop. The resulting probability is multiplied by 3; since the order the cards appear in the flop is not important.

$$P_{\text{trips}} = 3 \times 250 \times 4849 \times 4448 = 1321225$$

- To find the probability of a flop being "quads" we observe that the probability of picking the first card similar to the pocket pair is 250 and that of the consecutive card is 149 in the event that the first card picked was of the same denomination. This, therefore, implies that the last card picked will be from another denomination implying a probability of one or 4848. there are three possible arrangements for this flop set.

Therefore

$$P_{\text{Quads}} = (250 \times 149 \times 1) \times 3 = 62450 \approx 31225$$

- The probability of picking a card similar to your hand is 250. The probability of picking another card from the remaining set of 49 cards that is different from your hand is 4849. Picking a card similar to this one has a probability of 348. Bearing in mind that the three cards are drawn together and therefore can be arranged in three different ways, we calculate the probability of a boat

$$P_{\text{boat}} = (250 \times 4849 \times 348) \times 3 = 91225$$