

Computers shuffle better than Humans – Yes it's true!

Take a look at the table below.

From a new pack of cards, you will see the results of human shuffling for every 15 seconds of shuffling.

It takes around 2 minutes of shuffling to completely randomise the cards so that no 2 cards from the previous deal are touching.

A sorted pack of 52 cards.																									
A	K	Q	J	T	9	8	7	6	5	4	3	2	A	K	Q	J	T	9	8	7	6	5	4	3	2
♠	♠	♠	♠	♠	♠	♠	♠	♠	♠	♠	♠	♠	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥
After 15 seconds of shuffling 26 cards are still touching.																									
2	6	5	4	3	T	9	T	J	5	T	9	8	7	6	5	2	A	K	Q	J	3	J	Q	J	3
♣	♦	♦	♦	♦	♣	♣	♥	♠	♣	♦	♦	♥	♥	♥	♥	♦	♣	♣	♣	♣	♣	♥	♦	♥	♥
After 30 seconds of shuffling 14 cards are still touching.																									
5	7	2	4	J	K	Q	T	9	Q	5	3	2	A	9	3	T	9	T	J	8	K	4	8	2	T
♦	♦	♥	♦	♠	♠	♠	♠	♠	♥	♣	♥	♠	♥	♦	♦	♣	♥	♠	♠	♦	♥	♠	♠	♦	♦
After 45 seconds of shuffling 8 cards are still touching.																									
J	4	5	4	K	6	6	K	5	7	2	A	K	Q	J	5	2	T	9	8	3	8	A	4	A	2
♦	♥	♠	♠	♠	♥	♠	♦	♦	♥	♠	♣	♣	♣	♥	♣	♥	♥	♥	♥	♠	♦	♦	♠	♠	♦
After 60 seconds of shuffling 5 cards are still touching.																									
4	5	2	A	K	Q	8	3	9	9	T	7	3	5	9	K	J	5	8	K	5	7	6	T	Q	4
♥	♠	♥	♣	♣	♣	♠	♠	♠	♠	♠	♠	♥	♠	♦	♥	♠	♠	♠	♠	♠	♠	♠	♥	♦	♦
J	3	2	A	J	Q	4	K	6	T	9	Q	3	8	A	4	2	T	A	2	6	J	6	7	7	8
♠	♦	♦	♥	♥	♠	♠	♥	♠	♠	♠	♠	♠	♦	♦	♠	♥	♠	♠	♠	♠	♠	♦	♠	♦	♥

On average the most people shuffle for less than 15 seconds and some of us are better than others.

Sophisticated techniques are neither random nor any better. For example;

- Pre dealing into piles before and or after the shuffle
- The “rifle” shuffle. rifle shuffling is no better because after 8 perfect rifle shuffles the deck is back to where it started!

Computer dealing truly randomises hands.

This is why some people think the hands are “not fair”. It’s simply that we have been brought up in a bridge world of manually shuffled hands which tend to be flatter and not randomly distributed. This does mean more instances of long distributions, singletons and voids, but statistically you should have the same chance of picking up 13 spades as a 1 NT hand.

Reg Hull – March 2016

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