

Playing card sequences

Ways of ordering

Take the Ace, 2 and 3 of Hearts. How many different ways can you order them?

How about the Ace, 2, 3 and 4?

Keep increasing the number of cards.

How many ways can you order all 52 cards?

Digit cards

You can "write" the number 2,103 by putting the 2, 10 and 3 cards next to each other.

Which numbers can you make using just the Hearts?

What's the biggest number you can make using all 36 number cards?

Deal into two piles

Again, take the Ace, 2, 3 and 4 of Hearts.

Deal them alternately into two piles, then pick the piles up and put them together.

How many times do you need to repeat this before the cards are reversed from their original order?

How many times with 6 cards? With 8? With n ?