

1 Four people want to sit in a row. How many ways can they be ordered?

2 There is a classroom with 20 desks arranged in 4 columns of 5 desks. 4 friends, Amy, Bellie, Cary, and Denice want to sit in the same row. How many ways can they do so?

A deck of cards has 4 suites, known as Hearts(red), Diamonds(red), Spades(black), and Clubs(black). Each suite has one of each card type: Ace, 2, 3, 4, 5, 6, 7, 8, 9, 10, Jack, Queen, King. There are in total 52 cards in a deck, with 4 suites of 13 cards.

3 If you draw a card, from the deck, what is the probability of drawing an Ace(this is given by the # of ways to get that outcome over total number of outcomes).

What is the change of drawing a diamond?

4 If I take out all the cards with numbers on them(2, 3, 4, 5, 6, 7, 8, 9, 10) and draw a card, what is the chance I draw an Ace?

What is the chance I draw a 2?

5 What is the chance that if I draw a card from the deck (could be any card), the second card is an ace?

6 What is the chance if I draw two cards that they're both hearts?

7 What is the chance if I draw two cards only one of them is a heart?

8 What is the chance if I draw two cards either one or two of them is a heart?

9 I draw two cards. What is the chance the first card is higher than the second?
(Ace < 2 < 3 < 4 < 5 < 6 < 7 < 8 < 9 < 10 < Jack < Queen < King)