

To calculate how many possible combinations can be made from 2 groups of objects - Questions

1. At the café you can have one food item and one drink for £3. What possible combinations could you make?



How many possible combinations are there altogether?

2. a. The café sells the following sandwiches: ham, tuna, cheese, chicken and the following drinks: orange juice, tea, coffee, water
How many different combinations can you make?
How many of these contain tuna sandwiches.
- b. Jack has five different coloured pairs of socks: red, yellow, green, blue and black. He has three pairs of shoes: trainers, boots, school shoes.
How many different combinations can he make?
How many of these combinations include school shoes?
- c. The teacher has six different coloured pots: yellow, orange, red, purple, green and pink. She has four different stationery items: pencils, scissors, rulers and markers.
How many pot and stationery combinations can she make?
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3. a. The café sells some different sandwiches and some different drinks. It advertises that altogether there are 24 possible combinations to be made. How many different sandwiches might it sell and how many different drinks?
- b. The clothes shop sells some different coloured hats and some different coloured scarves. Altogether there are 20 possible combinations. How many different colour hats might there be and how many different colour scarves?

To calculate how many possible combinations can be made from 2 groups of objects - Answers

Question No.	Question	Answer
1	At the café you can have one food item and one drink for £3. What possible combinations could you make? How many possible combinations are there altogether?	Sandwich and cola Sandwich and orange juice Sandwich and apple juice Sandwich and tea Pizza and cola Pizza and orange juice Pizza and apple juice Pizza and tea 8 different combinations.
2	a. How many different combinations can you make? How many of these contain tuna sandwiches. b. How many different combinations can he make? How many of these combinations include school shoes? c. How many pot and stationery combinations can she make?	a. 16 combinations, 4 containing tuna sandwiches b. 15 combinations, 5 with school shoes c. 24 combinations
3	a. How many different sandwiches might it sell and how many different drinks? b. How many different colour hats might there be and how many different colour scarves?	a. 1 sandwich and 24 drinks, 2 sandwiches and 12 drinks, 3 sandwiches and 8 drinks, 4 sandwiches and 6 drinks, 6 sandwiches and 4 drinks, 8 sandwiches and 3 drinks, 12 sandwiches and 2 drinks, 24 sandwiches and 1 drink b. 1 hat and 20 different scarves, 2 hats and 10 different scarves, 4 hats and 5 different scarves, 5 hats and 4 different scarves, 10 hats and 2 different scarves, 20 hats and 1 scarf