



Probability Fundamental Counting Principle - Scenario Details Complex Restriction to Answer

1

How many different avatars can you make?

You are putting together an avatar. You choose one hairstyle (short, long) and one eye color (brown, light blue, green). 1 of the possible avatars is unavailable.

A	5	B	4
C	7	D	6

2

How many different burgers can you make?

You are putting together a burger. You choose one patty (beef, chicken) and one cheese (cheddar, swiss, pepper jack). If the patty is chicken, then the cheese must be pepper jack.

A	3	B	6
C	5	D	4

3

How many different cones can you make?

You are putting together an ice cream cone. You choose one flavor (chocolate, vanilla, strawberry) and one sauce (caramel, fudge). If the sauce is caramel, then the flavor must be vanilla.

A	3	B	4
C	6	D	5

4

How many different meals can you make?

You are putting together a meal. You choose one main (burger, pasta) and one dessert (ice cream, cheesecake, sundae). If the main is pasta, then the dessert must be cheesecake.

A	6	B	4
C	5	D	3

5

How many different outfits can you make?

You are putting together an outfit. You choose one shirt (red, blue) and one pants (blue, green, white). 1 of the possible outfits is unavailable.

A	4	B	6
C	7	D	5

6

How many different burgers can you make?

You are putting together a burger. You choose one patty (beef, chicken, veggie) and one cheese (cheddar, swiss). The swiss cheese and the beef patty cannot be chosen together.

A	6	B	5
C	4	D	7

7

How many different avatars can you make?

You are putting together an avatar. You choose one hairstyle (short, long, curly), one eye color (brown, light blue), and one hat color (red, navy, black, white). 3 of the possible avatars are unavailable.

A	22	B	9
C	21	D	24

8

How many different burgers can you make?

You are putting together a burger. You choose one patty (beef, chicken) and one cheese (cheddar, swiss, pepper jack). The pepper jack cheese and the chicken patty cannot be chosen together.

A	6	B	4
C	5	D	7