Name

Probability Fundamental Counting Principle - Scenario Details Complex Restriction to Strategy

1

You are putting together a meal. You choose one main (burger, pasta) and one dessert (ice cream, cheesecake, sundae). 1 of the possible meals is unavailable.

Which strategy correctly counts the number of different meals?

A Add together the number of choices for every option.

B Multiply the choices for every option and ignore the

C Multiply to count every outcome, then subtract the

D Subtract the number of options from the total number of

2

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

Which strategy correctly counts the number of different meals?

A Subtract the number of options from the total number of

B Split the count into two cases, multiply within each case, then

C Multiply the choices for every option and ignore the

D Add together the number of choices for every option.

3

You are putting together an ice cream cone. You choose one flavor (chocolate, vanilla, strawberry) and one sauce (caramel, fudge). The caramel sauce and the strawberry flavor cannot be chosen together.

Which strategy correctly counts the number of different cones?

A Multiply to count every outcome, then subtract the

B Subtract the number of options from the total number of

C Add together the number of choices for every option.

D Multiply the choices for every option and ignore the

4

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

Which strategy correctly counts the number of different cones?

A Split the count into two cases, multiply within each case, then

B Add together the number of choices for every option.

C Multiply the choices for every option and ignore the

D Subtract the number of options from the total number of

5

You are putting together an avatar. You choose one hairstyle (short, long), one eye color (brown, light blue, green), and one hat color (red, navy, black, white). The brown eye color and the short hairstyle cannot be chosen together.

Which strategy correctly counts the number of different avatars?

A Add together the number of choices for every option.

B Subtract the number of options from the total number of

C Multiply the choices for every option and ignore the

D Multiply to count every outcome, then subtract the

6

You are putting together a pizza. You choose one size (small, medium) and one crust (flat, thick, stuffed). 1 of the possible pizzas is unavailable.

Which strategy correctly counts the number of different pizzas?

A Subtract the number of options from the total number of

B Multiply the choices for every option and ignore the

C Multiply to count every outcome, then subtract the

D Add together the number of choices for every option.

7

You are putting together a vacation package. You choose one destination (beach, mountains, city) and one hotel (budget, standard). The beach destination and the standard hotel cannot be chosen together.

Which strategy correctly counts the number of different vacations?

A Multiply the choices for every option and ignore the

B Multiply to count every outcome, then subtract the

C Add together the number of choices for every option.

D Subtract the number of options from the total number of

8

You are putting together a custom car. You choose one color (red, black) and one wheel set (sport, classic, off-road). If the color is black, then the wheel set must be off-road.

Which strategy correctly counts the number of different cars?

A Multiply the choices for every option and ignore the

B Add together the number of choices for every option.

C Split the count into two cases, multiply within each case, then

D Subtract the number of options from the total number of