



## Probability Fundamental Counting Principle - Scenario Details Simple Restriction to Multiplication

1

You are putting together a custom car. You choose one color (red, black, grey, white) and one wheel set (sport, classic, off-road). The color cannot be white.

Which multiplication gives the number of different cars you can make?

A	$3 \times 3$	B	$3 + 3$
C	$5 \times 3$	D	$4 \times 3$

You are putting together a meal. You choose one main (burger, pasta, chicken) and one dessert (ice cream, cheesecake). The dessert cannot be ice cream.

Which multiplication gives the number of different meals you can make?

A	$3 \times 2$	B	$2 \times 1$
C	$3 \times 1$	D	$3 + 1$

3

You are putting together a gift basket. You choose one theme (spa, food) and one wrapping (red, gold, silver). The wrapping must be gold or red.

Which multiplication gives the number of different gift baskets you can make?

A	$2 \times 2$	B	$1 \times 2$
C	$3 \times 2$	D	$3 \times 3$

4

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

Which multiplication gives the number of different burgers you can make?

A	$4 \times 2$	B	$1 \times 2$
C	$3 \times 2$	D	$2 \times 2$

5

You are putting together a custom car. You choose one color (red, black, grey) and one wheel set (sport, classic). The color must be black or red.

Which multiplication gives the number of different cars you can make?

A	$1 \times 2$	B	$2 \times 2$
C	$4 \times 2$	D	$3 \times 2$

6

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

Which multiplication gives the number of different cones you can make?

A	$1 \times 1$	B	$1 \times 2$
C	$2 \times 2$	D	$1 + 2$

7

You are putting together a pizza. You choose one size (small, medium), one crust (flat, thick, stuffed), and one topping (pepperoni, mushroom, sausage, vegetables). The crust must be flat or stuffed.

Which multiplication gives the number of different pizzas you can make?

A	$2 \times 2 \times 4$	B	$3 \times 2 \times 4$
C	$2 + 2 + 4$	D	$2 \times 2 \times 5$

8

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

Which multiplication gives the number of different cones you can make?

A	$1 \times 2$	B	$4 \times 2$
C	$2 \times 2$	D	$3 \times 2$