

PROBABILITY 1: QUIZ SOLUTIONS

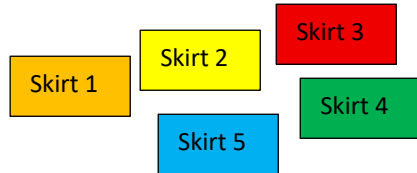
Question 1

Belinda has five skirts and four blouses. How many different outfits can she put together?

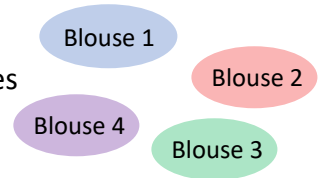
- A. 7 B. 9 C. 12 D. 20

Solution

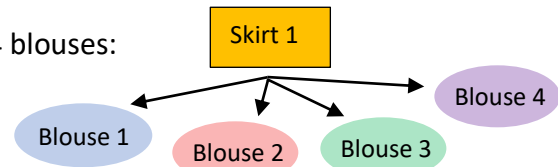
There are 5 skirts:



and 4 blouses



Belinda can pair Skirt 1 with each of the 4 blouses:



Similarly, she can pair each of the other skirts with each of the blouses.

$$\text{Number of different outfits} = 5 \times 4 = 20$$

So, the correct answer is D.

Question 2

A fast-food restaurant has a take-away special: R50 for a toasted sandwich and a drink. The choices are:

Toasted sandwich: grilled chicken, or beef patty, or fish fillet.

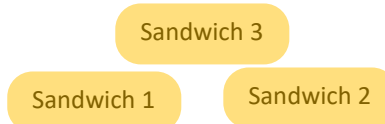
Drink: Coke, or Diet Coke, or Fanta, or Sprite.

How many meal combinations are possible?

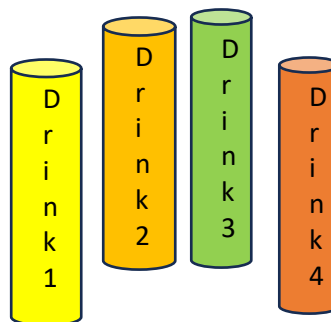
- A. 12 B. 10 C. 8 D. 6

Solution

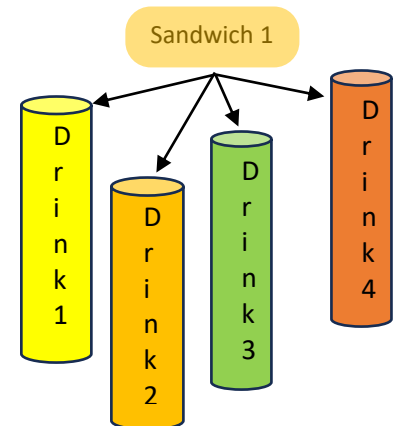
There are 3 kinds of toasted sandwiches:



There are 4 kinds of drink:



Toasted sandwich 1 can be paired with each of the drinks.



Similarly, each toasted sandwich can be paired with each of the drinks.

$$\text{Number of meal combinations} = 3 \times 4 = 12$$

So, the correct answer is A.

Question 3

A wedding caterer offers you three choices for the main course and five options for dessert. How many different meals (made up of a main course and a dessert) are possible?

- A. 6 B. 8 C. 10 D. 15

Solution

Each of the three main courses can be paired with each of the five desserts.

$$\text{Number of different meals} = 3 \times 5 = 15$$

So, the correct answer is D.

Question 4

An online entertainment company offers an evening special: choose one restaurant from six available and either flowers, chocolates, or wine. How many evening special options are there?

- A. 7 B. 9 C. 10 D. 18

Solution

Each of the six restaurants can be paired with flowers, chocolates or wine.

$$\text{Number of evening special options} = 6 \times 3 = 18$$

So, the correct option is D.

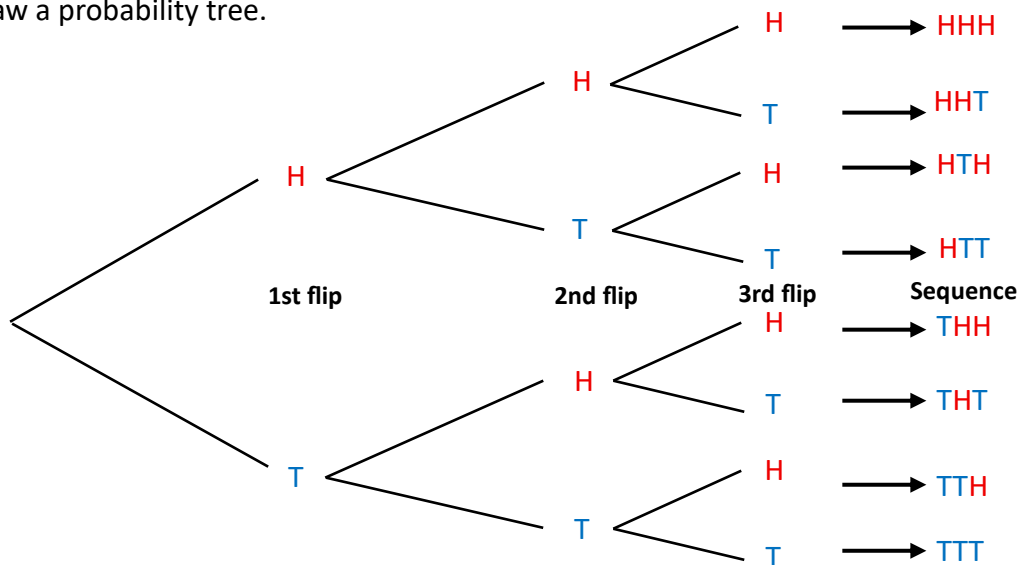
Question 5

If a coin is flipped three times, how many different sequences of heads and tails are possible?

- A. 6 B. 8 C. 9 D. 27

Solution

Draw a probability tree.



$$\text{Number of different sequences} = 2 \times 2 \times 2 = 8$$

So, the correct answer is B.