

Name: Class:

Combinations

- a. Joy wants to order her birthday cake. The bakery she wants to order from makes vanilla, chocolate, mint, and chocolate chip flavoured cakes. Each flavor of cake can be in small, medium or large size. How many different combinations can she choose from?
- b. Pamela is making dinner for her friends. She can make fried rice, fried potatoes, or white rice as her main dishes. Also she can make chicken source, beef source, or liver source to accompany her main dishes. As for dessert, she can make apple pie or pumpkin pie. How many different combinations of dinner dishes can she make?
- c. Angela is deciding on what to put on for a party. She has a blue dress, gold dress, green dress and a red dress. As for the shoes, she has a pair of black, blue, red and gray shoes. If she can put -on any dress with any pair of shoes, how many different combinations can Angela choose from?



Name: Class:

Combinations

- a. Joy wants to order her birthday cake. The bakery she wants to order from makes vanilla, chocolate, mint, and chocolate chip flavoured cakes. Each flavor of cake can be in small, medium or large size. How many different combinations can she choose from?

Let's first of all write down the information given

-Number of flavors = 4,

-Number of sizes = 3,

-Number of different possible combinations = $4 \times 3 = 12$

Therefore, Joy will have 12 different combinations to choose from.

- b. Pamela is making dinner for her friends. She can make fried rice, fried potatoes, or white rice as her main dishes. Also she can make chicken source, beef source, or liver source to accompany her main dishes. As for dessert, she can make apple pie or pumpkin pie. How many different combinations of dinner dishes can she make?

Let's first of all write down the information given

-Number of main dishes = 3

-Number of source types = 3,

-Number of desserts = 2

To find the number of different possible combinations, multiply 3 by 3 by 2

$$= 3 \times 3 \times 2 = 18$$

Therefore, Pamela can make 18 different combinations of dinner dishes.



- c. Angela is deciding on what to put on for a party. She has a blue dress, gold dress, green dress and a red dress. As for the shoes, she has a pair of black, blue, red and gray shoes. If she can put on any dress with any pair of shoes, how many different combinations can Angela choose from?

Let's first of all write down the information given

-Number of dresses = 4

-Number of pair of shoes = 4

To find the number of different possible combinations, multiply 4 by 4

$$4 \times 4 = 16$$

Therefore, Angela can pick from 16 different possible combinations

