

Exercise 1

Calc. : ✗

A single fair die is rolled. Let **A** be the event “number 2” and **B** the event “even number”. Determine if **A** and **B** are independent. Justify your answer.

2 marks

Exercise 2

Calc. : ✗

A candy is randomly selected from a paper box with 6 hard candies and 12 soft candies. If **H** is the event of getting a hard candy and **S** is the event of getting a soft candy, determine the following probabilities:

1. $P(H)$

2 marks

2. $P(S)$

2 marks

3. $P(H \cap S)$

2 marks

4. $P(H \cup S)$

2 marks

Exercise 3

Calc. : ✗

In a group of 25 people, 14 like pizza and 16 like hamburger. One person likes neither pizza nor hamburger.

1. Represent the situation using a Venn diagram.

2 marks

What is the probability that a person randomly selected:

2. Likes pizza?

1 mark

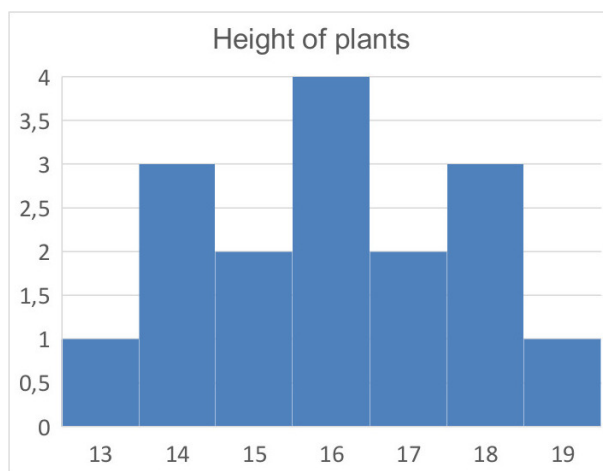
3. Likes pizza, knowing that he/she likes hamburger?

2 marks

Exercise 4

Calc. : ✗

The following histogram represents the height of the plants of the new garden.



1. Fill in the table below using the data from the histogram.

2 marks

height (cm)							
frequency							

2. Determine the number of plants.

2 marks

3. Determine the mode.

2 marks

4. Determine the mean.

2 marks

5. Determine the median.

2 marks

Exercise 5

Calc. : ✖

Given a cube of side 3 m:

- | | |
|---|---------|
| 1. Draw the cube on paper. | 3 marks |
| 2. Determine the length of a face diagonal of the cube. | 3 marks |
| 3. Determine the length of a body diagonal of the cube. | 3 marks |
| 4. Determine the volume of the cube. | 3 marks |
| 5. Determine the surface of the cube. | 3 marks |