## Ministry of Education and Youth

## Primary Exit Profile (PEP 5)

June 2023

## Performance Task - Mathematics

Time: 1 hour 30 minutes

## Write your name and the name of your school below:

Name of Student

Name of School

## DO NOT OPEN THIS BOOKLET UNTIL TOLD TO DO SO

## GENERAL INSTRUCTIONS:

This task has four parts: Part 1, Part 2, Part 3, and Part 4.
Read the information in each part carefully. Use the information provided to answer ALL questions in each part.

## Building a Computer Lab

The principal of a school wants to build a computer lab on a plot of land next to the school premises. He wants the computer lab to hold as many students as possible. The principal also wants to use the least expensive seating option for the lab.


Help the principal to:

1. determine how much fencing to buy to enclose the plot of land
2. calculate the total floor area of the computer lab
3. determine how much furniture can fit inside the computer lab
4. determine how many students can be seated in the computer lab at once
5. recommend which seating option should be used to furnish the computer lab

## Part 1: Plot of Land

The diagram below represents the plot of land that the principal has identified to build the computer lab. The plot of land is 22 metres long and 18 metres wide.


## Question 1

The principal would like to buy fencing to enclose the plot of land before he starts building. How many metres of fencing should he buy?

Show your work in the box provided below.

On the diagram below representing the plot of land, the section outlined in red, shows where the principal would like the computer lab to be built. The section inside the computer lab, shaded gray, shows where the teacher's desk and chair will be.


## Question 2

What is the total floor area of the computer lab?

Show your work in the box provided below.

## Part 2: Furniture

The Principal needs to purchase furniture for the computer lab. He already has a desk and chair for the teacher that he has set aside for the room. He would now like to get desks and chairs for students to furnish the rest of the room. He is thinking about two furniture options as shown below.

## Option 1: Two-Seater Furniture (One desk with two chairs)



Option 2: Five-Seater Furniture (One desk with five chairs)


## Question 3

A. What is the maximum number of Two-Seater Furniture that will fit inside the computer lab? Remember the space set aside for the teacher's desk and chair.

Show your work in the space provided below.
B. What is the maximum number of Five-Seater Furniture that will fit inside the computer lab? Remember the space set aside for the teacher's desk and chair.

Show your work in the space provided below.


Tick the box beside the answer you have chosen.


Option 1: Two-Seater
Option 2: Five-Seater

## Part 3: Cost of Furniture

## Question 5

The cost of each furniture option is shown in the box below.

Option 1 (Two-Seater): \$1,056 each
Option 2 (Five-Seater): \$2,958 each
A. What is the cost to purchase the total number of Two-Seater furniture needed to furnish the computer lab?

Show your work in the space provided below.
B. What is the cost to purchase the total number of Five-Seater furniture needed to furnish the computer lab?
Show your work in the space provided below.

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## Primary Exit Profile - 2023

Name:

Date of Birth: $\qquad$
School Name: $\qquad$
School Code: $\qquad$
Centre: $\qquad$
Parish:
Name of Test:
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