

HILLCREST HIGH SCHOOL



Grade 11 Maths Literacy Paper 2

November 2020

Examiner: Mrs Leuschke

Moderator: Mrs Jugmohan

MARKS: 75

TIME: 1½ hours

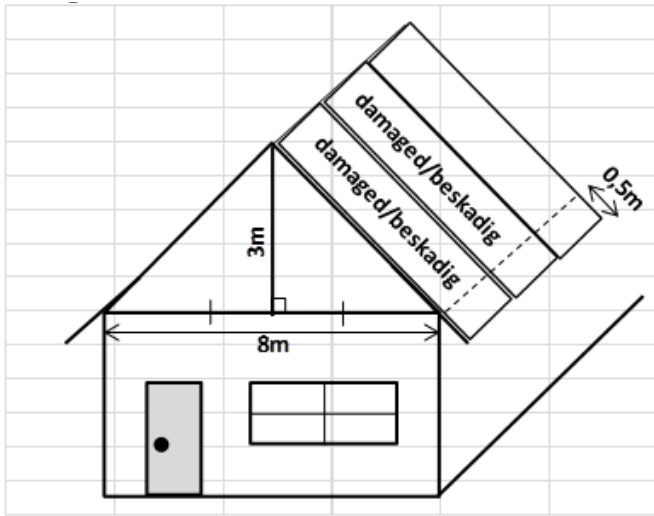
INSTRUCTIONS AND INFORMATION

Read the following instructions carefully before answering the questions.

1. This question paper consists of 4 questions. Answer ALL the questions.
2. Write your name and **your Mathematical Literacy teacher**'s name on your answer booklet.
3. Clearly show ALL calculations, diagrams, graphs, etc which you have used to determine your answers.
4. Answers only will NOT necessarily be awarded full marks.
5. An approved scientific calculator (non-programmable) may be used, unless otherwise stated.
6. Round off appropriately according to the context unless otherwise stated.
7. Number the answers EXACTLY as the questions are numbered.
8. Diagrams are not necessarily drawn to scale.
9. It is in your own interest to write legibly and to present your work neatly.

Question 1

Julie bought an old house at a good price and decided to do some renovations. Two of the roof plates, as shown in the drawing below, were damaged.



1.1 Calculate the length of the roof plates in meters, that she will need to buy. (6)

1.2 The front rectangular part of the wall needed painting. The dimensions of the door and window are as follows :

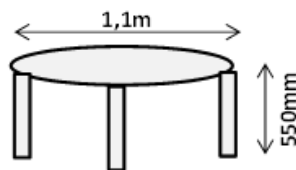
* Door 2,1m by 1,8m

* Window 3,5m by 120cm

1.2.1 If the wall is 3m high, calculate the area to be painted. (9)

1.2.2 If one litre of the paint Julie bought covers 7m^2 , then how many litres will she need to buy, if the wall needs two coats of paints? (Remember that you can only buy whole litres of paint.) (5)

1.3 Julie decided to make a decorative table cloth for an old table standing on verandah, the height and diameter of which is shown below. **Note : $\pi = 3,142$**



1.3.1 Calculate the diameter of the table cloth she must make if it must touch the floor. (3)

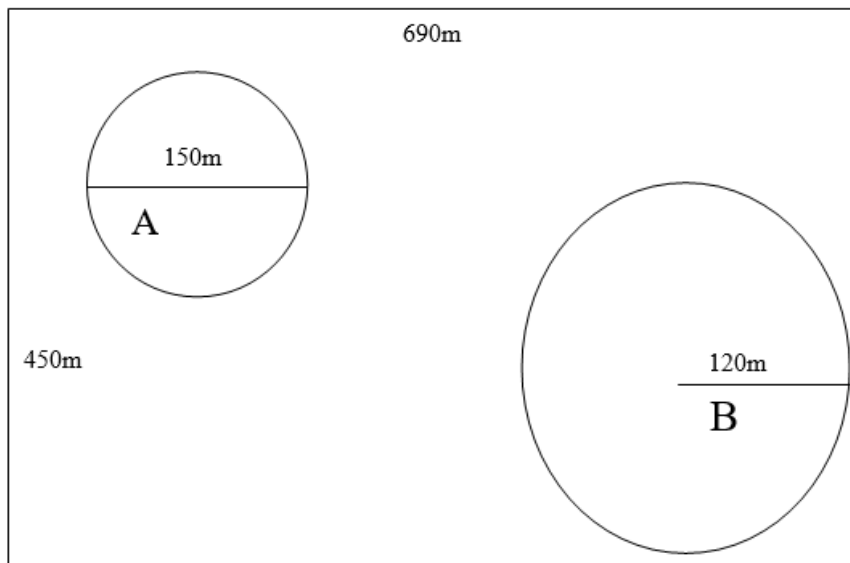
1.3.2 She wants to sew a piece of lace all along the outside edge of the cloth. She said that she will need to buy 10m of lace. Verify, showing ALL calculations, whether or not she is correct. (4)

1.3.3 If she wanted to varnish the top of the table before putting the cloth on, calculate the area she would need to varnish? (3)

[30]

Question 2

You and your friends decide to go camping at a Nature Reserve. The dimensions of the Nature Reserve are 690m by 450m. In the Nature Reserve there are two big dams, of which Dam A has a diameter of 150m and Dam B has a radius of 120m.



2.1 Calculate the area of the Nature Reserve. (2)

2.2 Calculate the area of Dam A and Dam B. (4)

2.3 One of your friends states that 1300 campsites can fit into the remaining space of the campsite if each campsite is 193m^2 . Verify, showing ALL calculations, whether or not your friend is correct. (7)

[13]

Question 3



This Map is brought to you by www.brabysmaps.co.za

3.1 Give the general direction from the Wanders Club to King Street. (2)

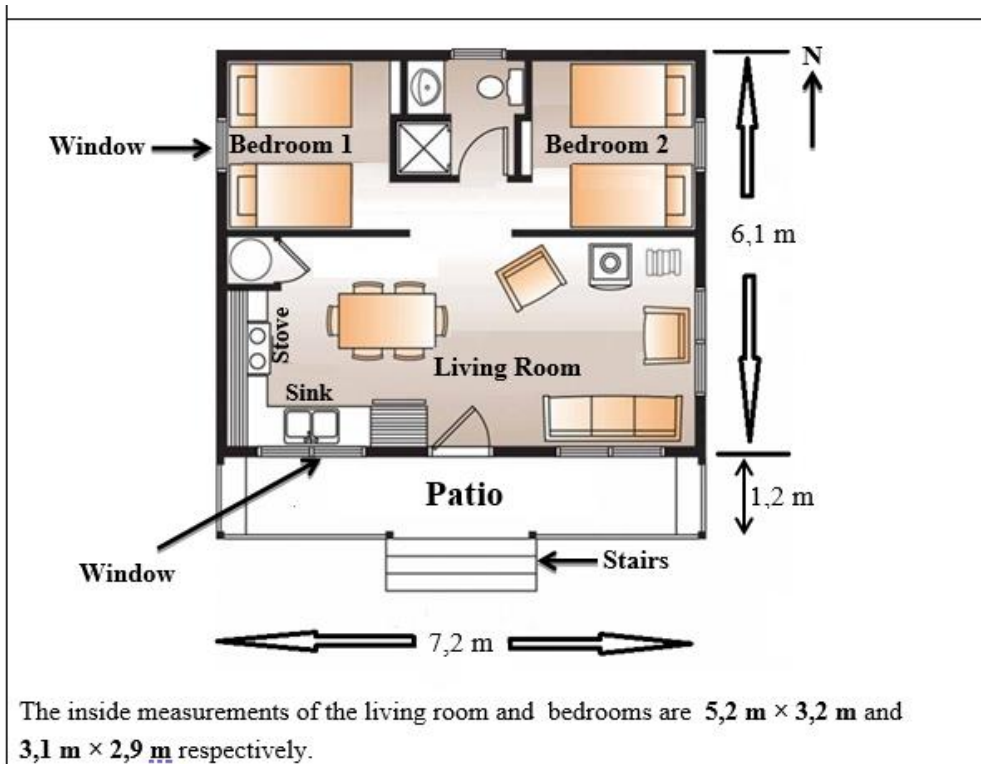
3.2 Use the scale of the map (1 : 19 300) to calculate the real life distance of Boshoff Street, from Victoria Road to Bulwer Road. (4)



- 3.3 Name two National Parks in the Eastern Cape. (2)
- 3.4 In which two provinces do you find the Kruger National Park? (2)
- 3.5 Which is the smallest province in South Africa? (2)
- 3.6 Which province is north of the Eastern Cape? (2)
- 3.7 Name two neighbouring countries to South Africa. (2)
- 3.8 What is the probability that you will select a province with a National Park as a holiday destination? (2)
- [18]

Question 4

Thando wants to buy a house in a new development near Parow. He received the plan below from the developer. The dimensions of the house are 7,2m by 6,1m. The length of the patio is the length of the house and the breadth of the patio is 1,2m.



- 4.1 How many windows does this house have? (2)
 - 4.2 Which elevation plan, North, South, East or West would show the front view of the patio of the house? (2)
 - 4.3 In which direction is the sink from Bedroom 2? (2)
 - 4.4 If the sun rises in the East and sets in the West, will the plants that he wants to plant outside the window of Bedroom 1 get morning or afternoon sun? (2)
 - 4.5 Calculate the perimeter of the outside of the house, excluding the patio. (2)
 - 4.6 Calculate the difference between the outside perimeter and the inside perimeter of the house. (4)
- [14]