



KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA



**NATIONAL
SENIOR CERTIFICATE**

GRADE 10

MATHEMATICAL LITERACY

COMMON TEST

JULY 2021

MARKS: 50

TIME: 1 hour

This question paper consists of 7 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of **THREE** questions. Answer **ALL** the questions.
2. Number the answers correctly according to the numbering system used in this question paper.
3. Start **EACH** question on a **NEW** page.
4. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
5. Show **ALL** calculations clearly.
6. Round off **ALL** final answers to two decimal places, unless stated otherwise.
7. Indicate units of measurement, where applicable.
8. Maps and diagrams are **NOT** necessarily drawn to scale, unless stated otherwise.
9. Write neatly and legibly.

QUESTION 1

1.1

Samkelo asked his friend Derick to help him with his bank statement. He is unsure if his statement is correct or not.

Table 1: Showing record of Samkelo's statement.

BFS Bank									
Mr Samkelo Bele 40 Coswald Brown Street Vryheid 3100			Your statement for January 2021			Account number 23456799 Vryheid Branch SWIFT address: SBZA TY 66			
Date	Details	Debit		Credit		Fee		Balance	
1/1/21	Opening Balance							12 783	56
3/1/21	Deposit			1 000	00	15	00	13 768	56
5/1/21	Payment: Con Cars	876	45			2	50	12 889	61
5/1/21	Payment: Andile B	2 000	00			2	50	10 887	11
12/1/21	EFT purchase	125	60			1	00	10 760	51
26/1/21	Payment: Londiwe	2 600	00			2	50	8 158	01
28/1/21	Salary			11 560	00			19 718	01

- Rent is Samkelo's biggest expense.

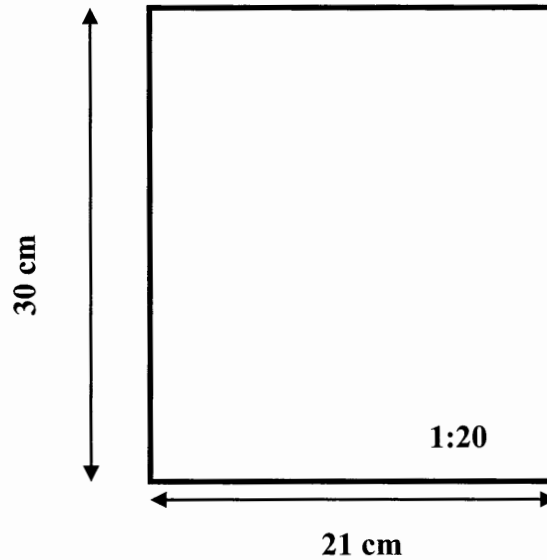
Use the information above to answer the following questions.

- 1.1.1 What is the name of the Bank that issued the statement? (2)
- 1.1.2 Define the term *opening balance* in this context. (2)
- 1.1.3 What is the name of the account holder? (2)
- 1.1.4 Calculate the total amount received by Samkelo during the statement period. (2)

1.2

The paper used to print record of statement comes in A4 sizes. The length of the paper is 21 cm and the breadth is 30 cm.

Table 2: The drawing of an A4 paper

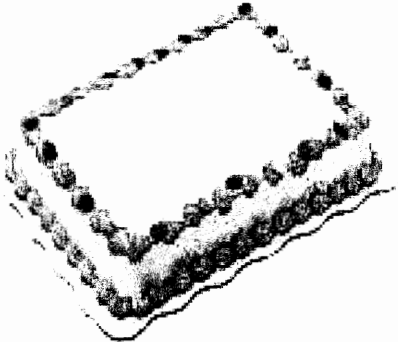


- 1.2.1 Calculate the perimeter of the A4 paper. (3)
- 1.2.2 Explain the meaning of the given scale. (2)
- 1.2.3 What type of scale is shown on the drawing? (2)

[15]

QUESTION 2

Nomfundo received a simple cake recipe from her friend in Swaziland .

Simple Cake Recipe: Ingredients:	Picture of the Simple Cake
<p>1 cup sugar $\frac{1}{2}$ cup butter 2 eggs 2 tsp vanilla $1\frac{1}{2}$ cup flour $1\frac{3}{4}$ tsp baking powder $\frac{1}{2}$ cup milk</p> <p>Prep time: 20 min Cook time: 30 min Servings: 12 Oven Temp: 350 °F</p> <p>You may use the following conversions: 1 cup = 250 ml</p>	
[Source: www.allrecipes.com]	

Use the information above to answer the following questions:

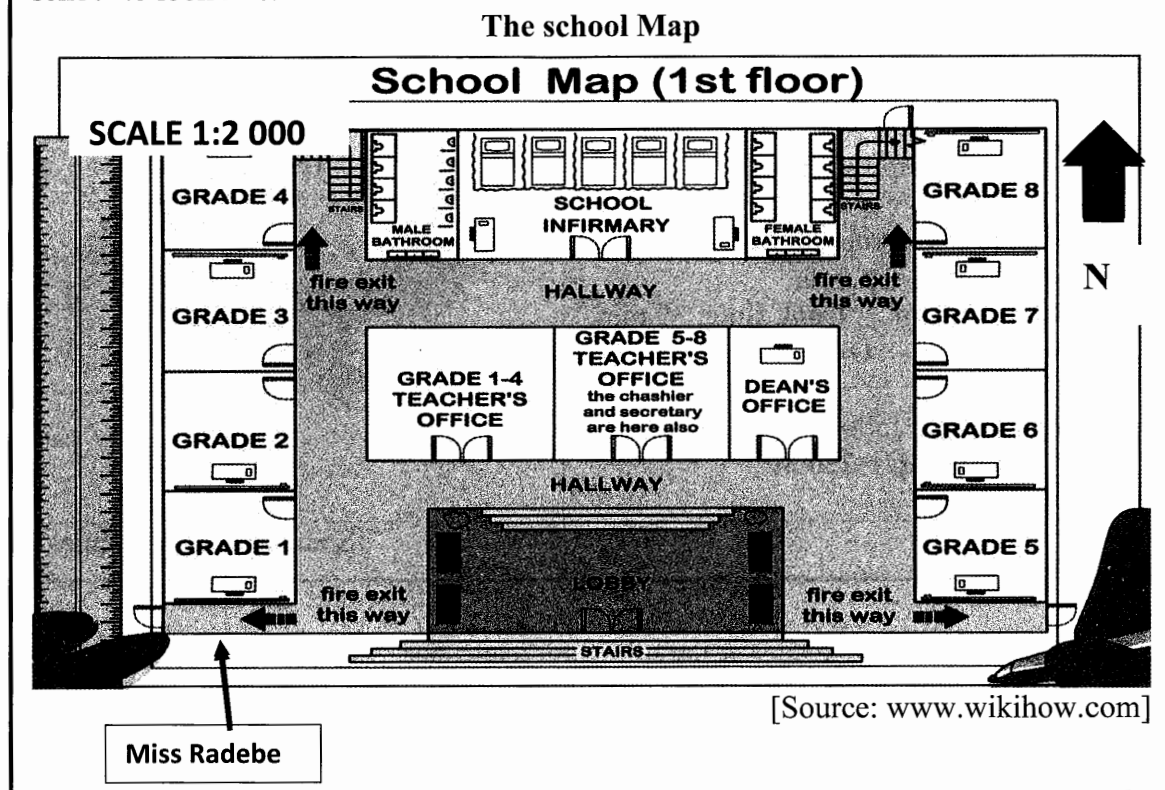
- 2.1 Convert 350°F to °C.
 You may use the following formula $^{\circ}\text{F} = (1,8 \times ^{\circ}\text{C}) + 32$. (3)
- 2.2 How many cups of butter must Nomfundo buy if she want to serve 36 people? (3)
- 2.3 If eggs 6 eggs cost R15. How much will she pay for 2 eggs? (2)
- 2.4 Nomfundo stated that it will take her less than 2 hours to make 2 cakes if she only consider the minimum times indicated in the recipe.
 Show with calculations, whether Nomfundo's statement is valid or not.
Note: The time Nomfundo refers to in her statement include preparation and cooking time. (5)
- 2.5 Nomfundo wants to make sure that she is finished baking a cake before her favourite soap at 8pm. At what time should she start baking? (3)

[16]

QUESTION 3

3.1

The principal of the Fisokuhle School is looking for sponsors that are going to develop his School. He uses the map below to show the potential sponsors how he wish his school to look like.



Use the map above to answer the following questions:

- 3.1.1 Miss Radebe is at the gate next to grade 1 and her next period is in grade 7. Describe the shortest route from the gate to the class. (4)
- 3.1.2 If the dimensions of the school in the map is $7\text{cm} \times 4,5\text{cm}$, calculate the actual length of the map in metres. The scale of the school in the map is 1:2000. (4)
- 3.1.3 Give a reason why teachers' offices are situated in the middle of the school? (2)
- 3.1.4 The Dean of the school used gate next to grade 8, was it convenient for him to use that gate to reach his office, state Yes or No and give a reason for your answer. (3)

3.2

A Grade 10 Mathematical Literacy class decided to test out the concepts of probability by rolling a dice and writing down all their observations.



Here is a list of the outcomes: 2,4,3,1,5,4,6,2,5,4,1,2,2,4,3

Use the information above to answer the following questions:

3.2.1 What is the probability of landing on a 2? Write your answer as a decimal. (3)

3.2.2 What is the probability of landing on any number but not 6. Write your answer as a percentage. (3)

[19]
TOTAL: 50

