education
MPUMALANGA PROVINCE
REPUBLIC OF SOUTH AFRICA

MGWENYA CIRCUIT

NATIONAL SENIOR CERTIFICATE

GRADE 11

MATHEMATICAL LTERACY

BASELINE TEST

JULY 2026

MARKS: 50

TIME: 50

This question paper consists of pages including cover page.

INSTRUCTIONS AND INFORMATION

1 This question paper consists of FOUR 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 appropriately according to the given context, unless stated otherwise

7 Indicate units of measurement, where applicable.

Write neatly and legibly

QUESTION 1

1.1 The below contains a list of explanations and definitions of concepts used in Mathematical Literacy

A	A point where a business does not make a profit nor a loss.
B	The total amount that it costs to make an item or provide a service.
C	A measuring system using metres, litres and kilograms.
D	The amount of space that is enclosed by the perimeter of on object.
E	The amount of space available to hold something.
F	Money paid to you as a reward for an investment.

Use table 1 above and match an explanation or a definition with EACH of the concepts below. Write only the letter (A-F) next to the question numbers (1.1.1 to 1.1.5), e.g. 1.1.3 G.

1.1.1 Area (2)

1.1.2 Metric system (2)

1.1.3 Break-even point (2)

1.1.4 Interest (2)

1.2 Zama started a business of selling soup in cups since it is Winter season. It cost him R7.50 to make one cup of soup, he then calculated that the daily fixed cost was R110, 00. He will sell the soup at R10,00

Number of soup cups (n)	0	10	15	**A**	50	100
Income in rand (R)	0	100	150	240	**B**	1000

TABLE 2 shows the income from the sales of cups of soup

Use the information above and TABLE 2 below to answer the following questions.

1.2.1 Write down the equation that can be used to calculate the income (2)

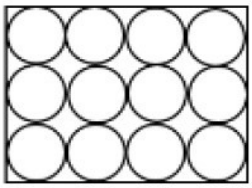
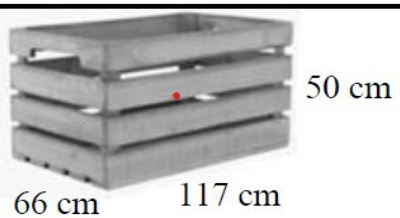
1.2.2 Determine the value of **A** and **B** in **Table 2** (4)

1.2.3 Zama decided to invest the profit he made from selling 100 cups of soup at an interest rate of 6,7% compounding yearly for a period of 2 years, how much will he have in his account after 2 years? (6)

[20]

QUESTION 2

2.1 Cylindrically shaped 440 g can of fish are imported by ship. The cans of fish are wrapped packs of 12.

Wrapped pack of 12 cans of fish	Top view of a pack of 12 cans	Shipping crate
		

Dimensions of a pack of 12 cans:

Length: 29,2 cm

Width: 21,9 cm

Height: 10,8 cm

The mass of an empty can is 40 g

The mass of a fully packed shipping crate with cans of fish is 280 kg

The inner dimensions of a shipping crate are 117 cm by 66 cm by 50 cm.

Packs of cans are placed lengthwise (length to length) in the shipping crates.

2.1.1 Aggie stated that an empty shipping crate has a mass of less than 20 kg. **(9)**

Verify, with calculations, if her statement is valid

QUESTION 3

3.1 Mr Lekhuleni, a father of three children, earns a salary of R18 350 per month after deductions. His budget every month is as follows:

Table 3: Mr Lekhuleni's Budget for June 2025

Monthly Income		**Monthly Expenditure**	
Net salary	R17 800	Bond repayment	R4 100
Housing subsidy	R550	Municipal rates	R475
		Water and refuse account	R325
		Electricity	R580
		Food	R2 750
		Petrol	R1 650
		Entertainment	R1 300
		Car instalment	R1 800
		School fees	R 800
		Clothes and cell phones (12% of the net salary)	**R2136**
GROSS SALARY	**R18350**	**Total expenditure**	

Use Table 3 on the previous page to answer the questions that follows:

3.1.1 Determine the total expenditure (2)

3.1.2 write down the ratio of water and refuse accounts to entertainment in a simplest form. (3)

3.1.3 Determine whether Mr Lekhuleni has deficit or surplus (2)

.

You may use the following formula.

Surplus/deficit =income-expenses

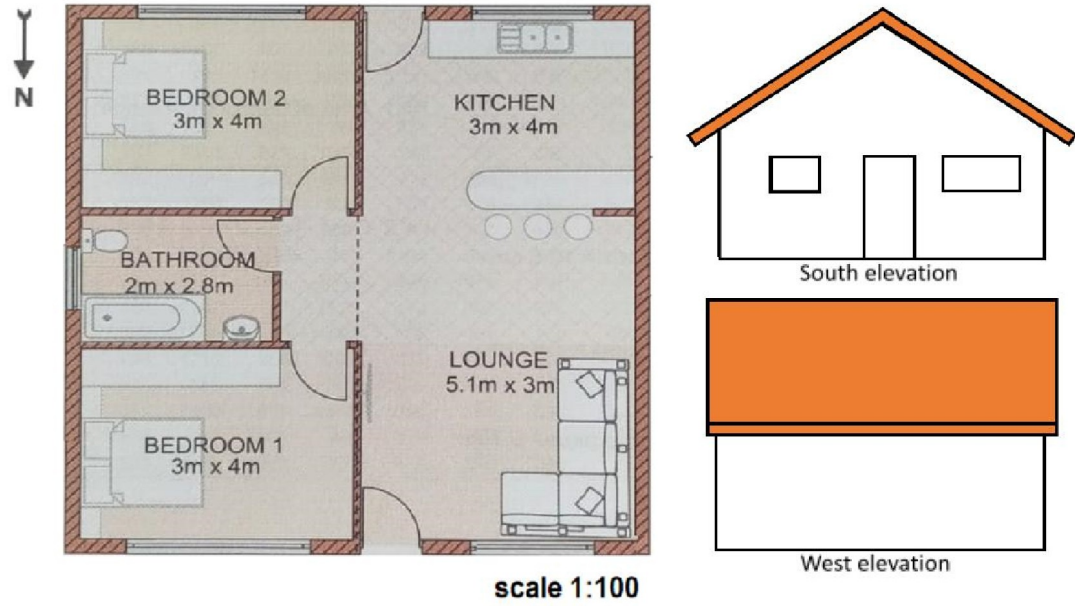
3.1.4 What percentage of total expenditure is food? Round of the final answer to the nearest whole number. (3)

[10]

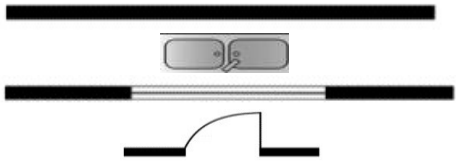
QUESTION 4

4.1

The floorplan below shows the house that Mr Block would like to build. The plan also shows the South and West elevations of the building



KEY SYMBOLS :



Solid walls

Sink

Windows in a wall

Door indicating which way to open

4.1.1 How many windows does this house plan have? (2)

4.1.2 Determine the measured dimensions of the lounge. (5)

4.1.3 Calculate the area (in m^2) of the lounge. (2)
You may use the following formula:
Area= length ×breadth

4.1.4 Carpet is sold at R169 per m^2. Calculate the cost of carpeting the lounge. (2)

[11]

TOTAL MARKS: 50