



DEPARTMENT OF
EDUCATION

GRADE 11

**PROVINCIAL INVESTIGATION
MATHEMATICAL LITERACY**

15 May 2026

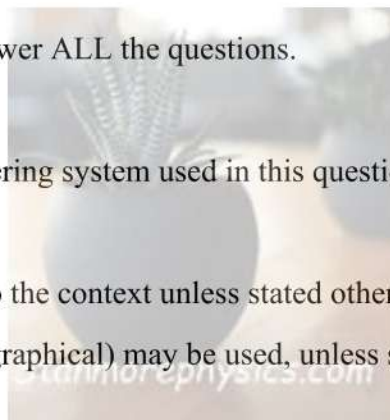
TOTAL: 83 MARKS

DURATION: 2 HOUR

The paper consists of 7 pages, including the cover page.

INSTRUCTIONS AND INFORMATION

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



QUESTION 1

1.1

Sipho Mopayi, a businessman, who owns a rugby team in Groblersdal. He budgeted an amount of R139 999 to buy sport kits for the team.

Item	
Rugby shirt, trouser and a pair of socks	R3 999,00 (a set) (excluding VAT)
Rugby boots	R1 299,95 (including VAT)
Shin guards	R350 (excluding VAT)

Use the information above to answer the questions that follow.

- 1.1.1 Write down the acronym VAT in full. (2)
- 1.1.2 List 4 items that a rugby player should have for own protection, except the ones mentioned above. (4)
- 1.1.3 Calculate the total amount (including VAT) of money he would spend on each player. (5)
- 1.1.4 Mr Sipho Mopayi intends to spend all the money on the in-field players and 5 out-field players sport kits. He thinks that the money would be sufficient for the whole sport kits. Verify whether the assumption is correct or not. (4)
- 1.1.5 Calculate VAT amount on the price of rugby boots. (4)

1.2

Sipho is working at the local shop. He earns a gross annual salary of R114 000.

Use the information above to answer the questions that follow.

- 1.2.1 Write the acronym UIF in full. (2)
- 1.2.2 Calculate Sipho 's monthly UIF contribution. (4)
- 1.2.3 Explain why UIF is important for workers. Give TWO reasons. (4)

1.3

Sipho plans a trip to USA, and he budgeted R14 800 in few months. He also plans to buy a laptop online at \$820.

NOTE: \$ 1=R16,53

Use the information above to answer the questions that follow.

1.3.1 Convert R14 800 to US Dollars (USD). (3)

1.3.2 Determine the price of the laptop in South African rand.

The rand weakens and exchange rate changes to: 1 USD = R19.80 (3)

1.3.3 Explain why a weak rand affects South African consumers buying imported goods. (2)
[37]

QUESTION 2

The table below shows the two different tariff options that Lelo found on the internet.

TARIFF OPTION A (CONTRACT)	TARIFF OPTION B (PAY-AS-YOU-GO)
Fixed monthly fee: R220	No monthly fee
Includes 300 minutes of calls	Call cost: R2.30 per minute
Extra call cost: R1.50 per minute	

Use the information above to answer the questions that follow.

2.1 Explain the term tariff. (2)

2.2 Give an advantage of option A. (2)

2.3 Calculate the total monthly cost for option B if Lelo uses 250 minutes of calls and identify the option which is cheaper for using the 250 minutes. (3)

2.4 Explain how choosing the wrong tariff can affect Lelo's monthly budget. (2)

[10]

QUESTION 3

3.1

A classroom layout plan is drawn using a number scale of 1:50 and on that plan the teacher's desk measures 6cm in length. Two learners's desks are 4cm apart on the plan.

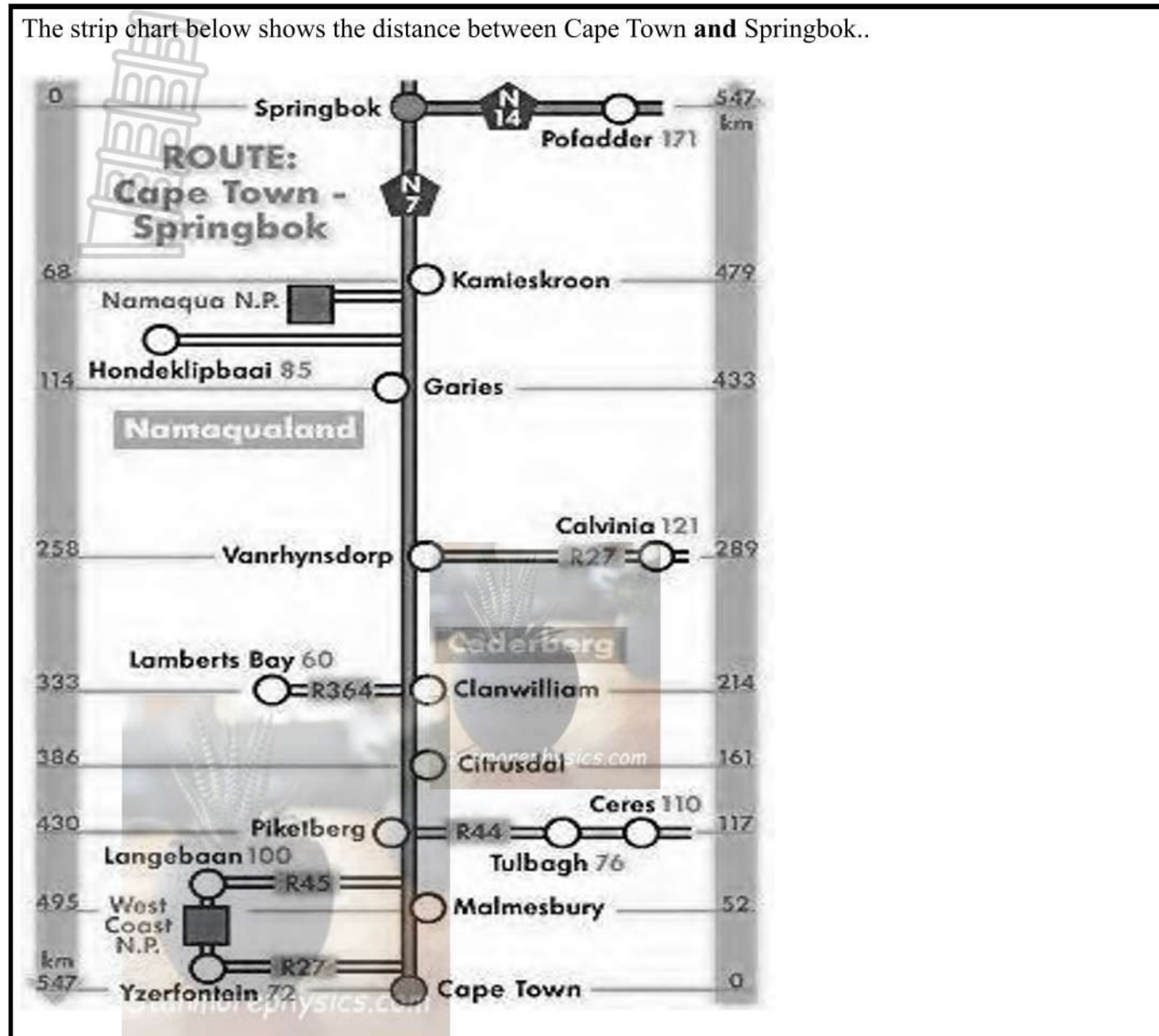
Use the information above to answer the questions that follow.

- 3.1.1 Write down the difference between bar scale and number scale. (4)
- 3.1.2 Explain the meaning of the scale 1:50. (2)
- 3.1.3 Calculate the actual length of the desk in metres. (3)
- 3.1.4 Calculate the actual distance between the desks in metres. (3)



3.2

The strip chart below shows the distance between Cape Town and Springbok..



Use the map above to answer questions that follow.

- 3.2.1 Give the difference between a strip map and a street map. (4)
- 3.2.2 Gavin wants to go to Ceres and he is coming from Vanrhynsdorp. Now direct him how he will reach Ceres mentioning all the National roads and Regional roads. (4)
- 3.2.3 What is the distance between Cape Town and Hondeklipbaai in metres? (8)

Note: The bypass to Hondeklipbaai is in the middle of Garies and Kamieskroon.

- 3.2.4 Koketso travelled from Malmesbury to Springbok. Prove if he was within the accepted speed limit if it took him 4 hours and 30 minutes to reach his destination.

You may use the following formula: $\text{Speed} = \frac{\text{Distance}}{\text{Time}}$

(5)

NOTE: Accepted speed limit is 120 km/hr.

- 3.2.5 Calculate the probability (to two decimal places) of choosing an even-numbered road from the regional roads.

(4)

[37]

TOTAL MARKS: 83



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

**NATIONAL SENIOR
CERTIFICATE**

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MARKING GUIDELINES**

MAY 2026

MARKS: 83

Symbol	Explanation
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table/graph/document/diagram
SF	Correct substitution in a formula
O	Opinion/Explanation
P	Penalty, e.g. for no units, incorrect rounding off, etc
R	Rounding off
NPR	No penalty for rounding
AO	Answer only
MCA	Method with consistent accuracy
RCA	Rounding consistent with accuracy

This marking guideline consists of 4 pages.

QUESTION 1 [37 MARKS]		ANSWER ONLY FULL MARKS	
Q	Solution	Explanation	Level
1.1.1	Value Added Tax ✓✓A	2A answer (2)	L1 F
1.1.2	• Water bottle ✓ • Head gear (scrum cap) ✓ • Shoulder pads ✓ • Mouth guard (gum shield) ✓A	4A correct answer (4)	L F
1.1.3	15% of R3999.00 ✓ = R599.85 ✓ $R3999.00 + R599.85 = R4598.85$ ✓ 15% of R350 = R52.50 $R350 + R52.50 = R402.50$ Therefore $R4598.85 + R402.50 + R1299.95$ ✓ = R6301.30 ✓	1M calculating VAT 1A answer 1M calculating VAT 1M adding all values CA answer (5)	L3 F
1.1.4	$R6301.30 \times 20$ ✓✓ = R126026 ✓ The money would be sufficient. ✓	2MA multiplying by 20 1CA answer 1O opinion (4)	L4 F
1.1.5	$R1299.95 \div 1.15$ ✓✓ = R1129.57 ✓✓	2A VAT inclusive concept 1A answer 1C conversion (4)	L2 F
1.2.1	Unemployment insurance fund ✓✓	2A answer (2)	L1 F
1.2.2	$R114000 \div 12$ ✓ = R9500 ✓ Therefore $1\% \times R9500$ ✓ = R95 ✓	1A divide by 12 1A 1MA UIF concept 1A answer (4)	L2 F
1.2.3	UIF provides temporary financial support if a worker lose their job. ✓✓ Supports workers during maternity leave or illness ✓✓	4O opinion (4)	L4 F
1.3.1	$R14800 \div R16.53$ ✓✓ = R895.34 ✓	2MA dividing by R16.53 1A answer (3)	L2 F
1.3.2	$R16.53 \times \$820$ ✓✓ = R13554.60 ✓	2MA multiplying 1A answer (3)	L2 F

1.3.3	South Africans pay more rand for the foreign goods ✓✓ OR Imported goods become more expensive ✓✓	2O opinion (2)	L4 F
		[37]	

QUESTION 2 [09 MARKS]

Q	Solution	Explanation	Level
2.1	Tariff - a tax or duty imposed by a government on imported or exported goods. ✓✓	2A explanation (2)	L1 F
2.2	Advantage – cheaper for high usage ✓✓ OR - Includes free minutes ✓✓ OR - Cost is more predictable ✓✓	2O opinion (2)	L4 F
2.3	$250 \times R2.30$ ✓ $= R575.00$ ✓ Option A = R220 Option B = R575 ✓ Therefore option A is cheaper ✓	1M multiplication 1A answer 1A option B 1O opinion (4)	L4 F
2.4	Financial stress ✓✓ OR Leads to poor budgeting ✓✓ OR Increase monthly expenses ✓✓ OR Money wasted on unused benefits ✓✓	2O opinion (2)	L4 F
		[10]	

QUESTION 3 [37 MARKS]			
Q	Solution	Explanation	Level
3.1.1	Bar scale – is a visual representation of distance on a map using a line or bar divided into equal parts, where each part shows a specific real-world distance. ✓✓ Number scale – is a numerical expression of the relationship between distances on the ground, written as a ratio. ✓✓	4A explanation (4)	L1 MP
3.1.2	1 unit on the plan represents 50 units in real life ✓✓ OR 1cm on the plan represents 50cm in reality ✓✓	2A explanation (2)	L1 MP
3.1.3	Length = $6\text{cm} \times 50$ ✓ $= 300\text{cm}$ ✓ Therefore $300\text{cm} \div 100 = 3\text{m}$ ✓	1MA multiplication 1A answer 1C conversion (3)	L2 M
3.1.4	Length = $4\text{cm} \times 50$ $= 200\text{cm}$ ✓ Therefore $= 200\text{cm} \div 100$ ✓ $= 2\text{m}$ ✓	1MA adding all values 1MA divide by 10 1A Simplifying 1CA opinion (3)	L2 M
3.2.1	Strip map – a map that shows a narrow route or strip of land. ✓✓ Street map – a map that shows a network of streets in an area. ✓✓	4A explanation (4)	L1 MP
3.2.2	From Vanrhynsdorp move south on the N7 ✓ Pass Clanwilliam and Cetrusdal ✓ Turn left on R44 ✓ Pass Tulbagh and move forward till you reach Ceres ✓	1A move to N7 1A 2 towns 1A R44 1A final town (4)	L2 MP
3.2.3	$479 - 433$ ✓ (distance from Garies to Kamierskoon) $= 46$ ✓ $\frac{46}{2}$ ✓ $= 23$ ✓ Therefore distance from Cape Town to Honderklipbaai is $= 433 + 23 + 85$ ✓ $= 541$ ✓ Therefore $541\text{km} \times 1000\text{m}$ ✓ $= 541\,000\text{m}$ ✓	1Rt 2 towns 1A answer 1M dividing by 2 1Ca answer 1M adding correct values 1A answer 1M multiplication 1C conversion (8)	L3 MP

3.2.4	Distance = 495km ✓ Time = $4 \times 30 \div 60$ = 4.5 hours ✓ Speed = $\frac{495\text{km}}{4.5\text{hrs}}$ ✓ = 110km/hrs. ✓ He is within the accepted speed limit ✓	1A answer 1C conversion 1SF substitution 1A answer 1O opinion (5)	L3 MP
3.2.5	Probability = $\frac{2}{4}$ ✓✓ = 0.5 ✓ = 0.50 ✓	1A numerator 1A denominator 1A answer 1A conversion (4)	L2 P
		[37]	

