



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS/ NATIONAL SENIOR CERTIFICATE EXAMINATIONS

MATHEMATICAL LITERACY P1

MAY/JUNE 2026

MARKS: 150

TIME: 3 hours

**This question paper consists of 15 pages and
a SPECIAL ANSWER BOOK of 17 pages.**

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FIVE questions.
2. Answer ALL the questions ONLY in the SPECIAL ANSWER BOOK provided.
3. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
4. Show ALL calculations clearly.
5. Round off ALL final answers appropriately according to the given context, unless stated otherwise.
6. Indicate units of measurement, where applicable.
7. Diagrams are NOT necessarily drawn to scale, unless stated otherwise.
8. Write neatly and legibly.

QUESTION 1

1.1 TABLE 1 below gives definitions of terminology used in Mathematical Literacy.

TABLE 1: DEFINITIONS OF TERMINOLOGY IN MATHEMATICAL LITERACY

LETTER	DEFINITION
A	Collect data from a group of people by asking questions
B	The method of collecting data that involves watching, listening, touching and reading
C	This is an entry into an account that shows a payment made into the account
D	Diagram used to show the distribution of data along a number line divided into quartiles
E	The unit value of one currency relative to the value of another currency
F	Group values into classes, sort, arrange and organise
G	Raw information that has been collected, without any organisation or analysis
H	When someone or an organisation takes money from your account
I	The rate at which a commodity, such as water, electricity or fuel, is consumed

Use TABLE 1 above and match a definition with the terminology below. Write only the letter (A–I) next to the question numbers (1.1.1 to 1.1.5), e.g. 1.1.6 J.

- 1.1.1 Box and whisker plot (2)
- 1.1.2 Exchange rate (2)
- 1.1.3 Observation (2)
- 1.1.4 Data (2)
- 1.1.5 Debit (2)

1.2

Many parents make monthly contributions towards educational policies to assist with their children's future tertiary expenses.

TABLE 2 below shows the accumulated amounts for different monthly investment options for different time periods.

TABLE 2: ACCUMULATED AMOUNTS FOR DIFFERENT MONTHLY INVESTMENT OPTIONS FOR DIFFERENT TIME PERIODS

MONTHLY INVESTMENT AMOUNT	TIME PERIOD WITH ACCUMULATED AMOUNTS		
	15 years	10 years	8 years
R500	R475 054	R238 231	R175 067
R1 000	R950 109	R476 463	R350 134
R1 500	R1 425 163	R714 694	R525 202

NOTE: Accumulated amount includes interest over the period.

[Adapted from <https://www.oldmutual.co.za>]

Use TABLE 2 and the information above to answer the questions that follow.

- 1.2.1 Round off, to the nearest ten thousand, the accumulated amount if R1 500 is invested monthly for eight years. (2)
- 1.2.2 Determine the number of months for an investment to accumulate to R350 134. (3)
- 1.2.3 An 8-year-old child will need approximately R475 000 to study when he/she reaches the age of 18 years.
- Write down the present monthly amount the parents should invest in an educational policy. (2)
- 1.2.4 Determine the difference in the accumulated amounts for an investment made over ten years if the parents invest R500 monthly compared to R1 500 monthly. (3)

1.3

Tourism South Africa keeps a record of tourists visiting South Africa. According to their records, the majority of tourists come from countries in the Southern African Development Community (SADC), while the remainder comes from other African and overseas countries.

TABLE 3 below shows the number of tourists of different age groups, from different countries, visiting South Africa during December 2024. Some values have been omitted.

TABLE 3: THE NUMBER OF TOURISTS OF DIFFERENT AGE GROUPS FROM DIFFERENT COUNTRIES FOR DECEMBER 2024

AGE GROUP	NUMBER OF TOURISTS			TOTAL
	OVERSEAS COUNTRIES	SADC COUNTRIES	OTHER AFRICAN COUNTRIES	
0–14	26 380	58 166	1 928	86 474
15–24	23 877	76 741	2 152	102 770
25–34	40 927	171 086	4 393	216 406
35–44	36 180	205 023	4 584	245 787
45–54	34 948	110 686	2 642	148 276
55–64	31 782	A	1 186	73 420
65+	28 069	17 250	575	45 894
TOTAL	222 163	679 404	17 460	919 027

[Adapted from www.statssa.gov.za]

Use TABLE 3 and the information above to answer the questions that follow.

- 1.3.1 State if the number of tourists from other African countries is *discrete data* or *continuous data*. (2)
- 1.3.2 Name the countries that have approximately twenty-four thousand tourists in the age group 15 to 24 years visiting South Africa. (2)
- 1.3.3 Determine the total number of tourists in the age group 25 to 44 years for December 2024. (2)
- 1.3.4 Calculate the missing value A, the number of tourists in the age group 55 to 64 years, from the SADC countries. (3)

[29]

QUESTION 2

2.1

Katleho is studying to become a chef. He ordered some products to be delivered to practise for his practical examination.

He received the tax invoice, shown on ANNEXURE A in the ANSWER BOOK, for his purchase.

Use ANNEXURE A to answer the questions that follow.

2.1.1 State what the number **130495399A** represents on the tax invoice. (2)

2.1.2 Calculate the missing value **A**, the savings amount on the pineapples. (2)

2.1.3 Determine the missing value **B**, the unit price of the yoghurt **before** the discount was applied. (3)

2.1.4 Calculate the missing value **C**, the total payment made. (4)

2.1.5 Katleho claims that the VAT amount was calculated incorrectly.

He performs the following calculation:

$$\begin{aligned} & \text{R}396,98 \times \frac{15}{100} \\ & = \text{R}59,55 \end{aligned}$$

$\therefore$ The VAT amount should be R59,55.

Explain why Katleho's VAT calculation is incorrect. (2)

2.2

Katleho's course at a food and beverage college is made up of two modules:

- A food-preparation module of one year
- A patisserie module of six months

The course can be paid using two options:

Option A: Total payment option

Option B: Payment plan option

Option A:

The total amount of R208 300 for the course is made up as follows:

- A deposit amount of R45 000
- A food-preparation module of R99 650
- The balance for the patisserie module

Option B:

TABLE 4 below shows the two payment plans if the two modules are not paid in full.

TABLE 4: PAYMENT PLAN FOR THE TWO MODULES

PAYMENT PLAN 1	PAYMENT PLAN 2
Food-preparation module	Food-preparation module
12 months instalment plan at R9 000 per month	R51 825 per semester ***
Patisserie module	Patisserie module
5 months instalment plan at R15 530 per month	10 months instalment plan at R7 765 per month

[Adapted from www.fbibfn.co.za]

NOTE:

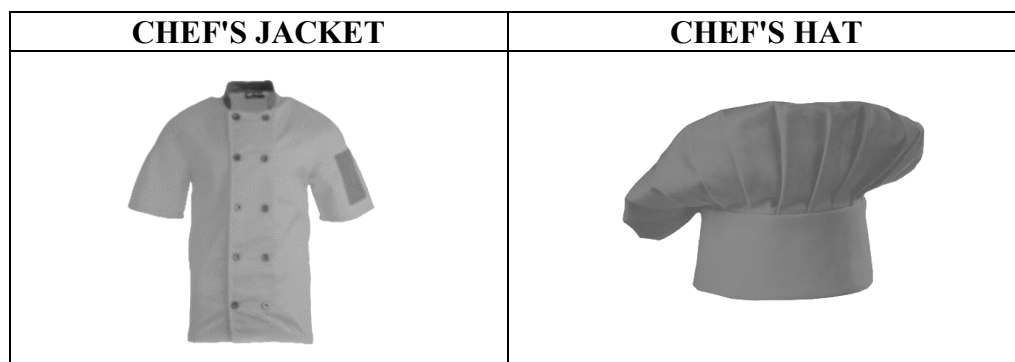
- 'Patisserie' is a word that refers to French pastries.
- A 'semester' is a period of 6 months.

Use TABLE 4 and the information above to answer the questions that follow.

- 2.2.1 Write down the ratio of *the deposit amount : the total amount* for the course in the form 1 : ... rounded off to TWO decimal places. (3)
- 2.2.2 Calculate the balance owing for the patisserie module if the total amount is paid in full. (2)
- 2.2.3 Determine the difference between *payment plan 1* and *payment plan 2* for the food-preparation module. (4)
- 2.2.4 Two years before the course started, Katleho's mother invested R39 500 at 7,15% interest, compounded annually, for the first year and at 7,85%, compounded annually, for the second year. (5)
- Calculate the total amount that she will receive at the end of the two years.

2.3

The college requires the students to wear a chef's uniform, as shown in the pictures below.



- A chef's jacket can be black (B), white (W) or red (R).
- A chef's hat can be black (b) or white (w).

TABLE 5 shows the different chef's uniform combinations.

TABLE 5: DIFFERENT CHEF'S UNIFORM COMBINATIONS

	BLACK JACKET (B)	WHITE JACKET (W)	RED JACKET (R)
BLACK HAT (b)	Bb	Wb	(ii)
WHITE HAT (w)	(i)	Ww	Rw

Use TABLE 5 and the information above to answer the questions that follow.

- 2.3.1 Determine the total number of chef's uniform outcomes. (2)
- 2.3.2 Write down, in the ANSWER BOOK, the missing chef's uniform combinations (i) and (ii) for the table above. (2)
- 2.3.3 Determine, as a decimal, the probability of randomly selecting a white chef's jacket. (3)

[34]

QUESTION 3

3.1

TABLE 6 below shows the average annual amount spent by the nine provinces per household on transport, housing and utilities, including the percentage of the household budget during 2023.

TABLE 6: AVERAGE ANNUAL AMOUNT SPENT BY THE NINE PROVINCES PER HOUSEHOLD ON TRANSPORT, HOUSING AND UTILITIES, INCLUDING THE PERCENTAGE OF THE BUDGET

PROVINCE	TRANSPORT		HOUSING AND UTILITIES	
	ACTUAL AMOUNT IN RAND	AS A %	ACTUAL AMOUNT IN RAND	AS A %
Western Cape (WC)	33 487	14,6	86 486	37,7
Eastern Cape (EC)	16 140	14,3	37 816	33,6
Northern Cape (NC)	20 850	16,5	36 351	28,7
Free State (FS)	13 982	12,5	34 131	30,4
KwaZulu-Natal (KZN)	15 834	12,9	44 046	35,8
North West (NW)	14 775	15,1	33 230	33,9
Gauteng (GP)	29 333	17,2	58 638	34,4
Mpumalanga (MP)	21 964	18,7	P	30,3
Limpopo (LP)	10 833	11,0	35 241	35,7

[Adapted from www.statssa.gov.za]

Use TABLE 6 above to answer the questions that follow.

- 3.1.1 Name ONE data collection instrument that can be used to collect the data above. (2)
- 3.1.2 Arrange the provinces in descending order, according to the amount spent on transport. (2)
- 3.1.3 Calculate the mean transport amount spent by the nine provinces. (3)
- 3.1.4 Determine the probability of randomly selecting a province that spent more than 20% of the budget on transport. (2)
- 3.1.5 A data analyst stated that the missing value **P**, spent on housing and utilities in Mpumalanga, is more than the amount spent on housing and utilities in the Free State.

Verify, showing ALL calculations, if the statement is VALID. (5)
- 3.1.6 Give a possible reason why the Western Cape spends the largest amount on transport, although its budget percentage spent on transport is not the highest. (2)

3.2

The graphs on ANNEXURE B in the ANSWER BOOK show the different reasons given by students for walking to educational institutions during 2020.

Use ANNEXURE B to answer the questions that follow.

- 3.2.1 Name the type of graphs drawn. (2)
- 3.2.2 Write down the second most popular reason why students walked to an educational institution in rural areas. (2)
- 3.2.3 Calculate the number of students walking to an educational institution because it is 'close enough' in urban areas. (5)
- 3.2.4 Give ONE reason why the percentage for 'public transport not available' is higher in the rural areas when compared to the urban areas. (2)
- 3.2.5 Calculate, as a fraction (with NO decimals), the probability of randomly selecting a student from a rural area who walked for 'health reasons'. (2)
- [29]**

QUESTION 4

- 4.1 The Road Accident Fund (RAF) is a government-run insurance scheme in South Africa that compensates victims who were involved in road accidents.

ANNEXURE C in the ANSWER BOOK shows an extract of an Income and Expenditure Statement of the Road Accident Fund (RAF) for the 2022/2023 period.

Use ANNEXURE C to answer the questions that follow.

- 4.1.1 The total estimated income for 2023 is R49 214 641 000.

Write this amount in words without using numerals. (2)

- 4.1.2 Calculate the actual amount collected in 2022 for the net RAF fuel levy. (3)

- 4.1.3 The average amount paid per claim during 2023 was R261 721,00.

Determine the number of claims paid during 2023. (4)

- 4.1.4 Give ONE possible example of an employee expenditure. (2)

- 4.2 Lindiwe is the chief financial officer for the Road Accident Fund (RAF). She travels to different centres and is paid per kilometre travelled for work purposes.

During October 2024, fuel claims were paid at a rate of 164,3c per km for work purposes.

TABLE 7 below shows the total number of kilometres she travelled for work purposes per month during 2023 and 2024.

TABLE 7: TOTAL NUMBER OF KILOMETRES TRAVELLED FOR WORK PURPOSES PER MONTH DURING 2023 AND 2024

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sep.	Oct.	Nov.	Dec.
2023	813	1 037	1 469	385	1 422	958	1 554	2 056	1 319	1 128	1 204	256
2024	918	356	56	1 586	2 096	524	836	1 070	836	2 590	1 682	450

[Adapted from actual log sheet]

Use TABLE 7 and the information above to answer the questions that follow.

- 4.2.1 Determine the range of the number of kilometres travelled during 2023. (3)

- 4.2.2 Give ONE valid reason why the number of kilometres travelled during December is much fewer than the number of kilometres travelled during November for both years. (2)

- 4.2.3 Lindiwe's employer stated that she was paid a total of R425 537 for travel purposes during October 2024.

Verify, showing ALL calculations, whether her statement is VALID. (5)

4.3

Lindiwe is 55 years old and earned a monthly taxable income of R101 027,08 during the 2024/2025 tax year.

Lindiwe is a member of a medical aid scheme and contributes for herself and her three children.

TABLE 8 below shows the tax tables for the 2024/2025 tax year.

TABLE 8: TAX RATES FOR THE 2024/2025 TAX YEAR

TAX BRACKET	TAXABLE INCOME	TAX RATES (in R)
1	1–237 100	18% of taxable income
2	237 101–370 500	42 678 + 26% of taxable income above 237 100
3	370 501–512 800	77 362 + 31% of taxable income above 370 500
4	512 801–673 000	121 475 + 36% of taxable income above 512 800
5	673 001–857 900	179 147 + 39% of taxable income above 673 000
6	857 901–1 817 000	251 258 + 41% of taxable income above 857 900
7	1 817 001 and above	644 489 + 45% of taxable income above 1 817 000

TAX REBATES FOR 2024/2025	
Primary	R17 235
Secondary (65 and older)	R9 444
Tertiary (75 and older)	R3 145
MEDICAL TAX CREDITS PER MONTH FOR 2024/2025	
Tax payer	R364
Tax payer and one dependent	R728
Each additional dependent	R246

[Adapted from www.sars.gov.za]

Use TABLE 8 and the information above to answer the questions that follow.

4.3.1 Calculate Lindiwe's annual medical tax credits. (4)

4.3.2 Determine the amount of income tax Lindiwe must pay for the 2024/2025 tax year. (7)
[32]

QUESTION 5

5.1

Rory is a South African English language teacher. To supplement his income, he teaches English online as a foreign language to South Korean and South African learners.

TABLE 9 shows how the income (in rand) is generated from teaching English as a foreign language to South African and South Korean learners.

TABLE 9: INCOME FROM TEACHING ENGLISH AS A FOREIGN LANGUAGE TO SOUTH AFRICAN AND SOUTH KOREAN LEARNERS

TEACHING SOUTH AFRICAN LEARNERS (IN RANDS)	TEACHING SOUTH KOREAN LEARNERS (CONVERTED TO RANDS)
- Basic: R2 000 per month - R45,50 per hour	R95,00 per hour

ANNEXURE D in the ANSWER BOOK shows the income graphs relating to teaching English as a foreign language to South African and South Korean learners.

Use ANNEXURE D and the information above to answer the questions that follow.

5.1.1 Calculate Rory's income if he taught South Korean learners for 15 hours. (2)

5.1.2 Write down a formula to calculate his total income for teaching English as a foreign language to South African learners.

Total Income = ... (3)

5.1.3 Identify the graph (**A** or **B**) which shows the income generated from teaching South Korean learners. Give a mathematical reason for your answer. (3)

5.1.4 Write down the number of hours where the income generated from teaching learners from both countries is approximately the same. (2)

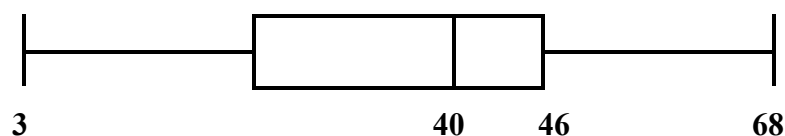
5.2

In South Korea, the average class size is 22 learners per class.

In a particular school in South Africa, the class sizes range from 3 learners to 68 learners per class.

Below is a box and whisker plot showing the distribution of the class sizes for this South African school.

BOX AND WHISKER PLOT SHOWING THE DISTRIBUTION OF CLASS SIZES FOR A SOUTH AFRICAN SCHOOL



[Adapted from www.teflacademy.com]

Use the information above to answer the questions that follow.

5.2.1 Write down the value of the 50th percentile for this South African school. (2)

5.2.2 The interquartile range for this South African school is 23.

Rory stated that the lower quartile of this South African school is exactly the same as the average class size in South Korea.

Verify, with calculations, whether Rory's statement is VALID. (5)

5.3

Rory decided to relocate to South Korea to teach English.

TABLE 10 below shows information about the residential electricity tariffs used in South Korea.

TABLE 10: RESIDENTIAL ELECTRICITY TARIFFS IN SOUTH KOREA

SUMMER (1 JULY–31 AUGUST)			
BLOCK	USAGE INTERVAL	STEPPED ELECTRICITY CHARGE (KRW/kWh)	DEMAND CHARGE (IN KRW)
1	1–300 kWh	112,00	910,00
2	More than 300–450 kWh	206,60	1 600,00
3	More than 450 kWh	299,30	7 300,00

OTHER SEASONS (1 JANUARY–30 JUNE, 1 SEPTEMBER–31 DECEMBER)			
BLOCK	USAGE INTERVAL	STEPPED ELECTRICITY CHARGE (KRW/kWh)	DEMAND CHARGE (IN KRW)
1	1–200 kWh	112,00	910,00
2	More than 200–400 kWh	206,60	1 600,00
3	More than 400 kWh	299,30	7 300,00

NOTE:

- KRW = South Korean won (₩).
- Demand charge is an additional charge payable only in the last block of consumption.

[Adapted from <https://home.kepco.co.kr>]

Use TABLE 10 and the information above to answer the questions that follow.

- 5.3.1 Calculate, in rand, the total cost for 325 kWh of electricity consumed during the month of May.

You may use the formula:

$$\text{Total cost} = \text{Stepped electricity charge} + \text{Demand charge}$$

$$\text{Exchange rate: R1} = \text{₩}78,07$$

(7)

- 5.3.2 Give ONE possible reason why the usage interval for the summer and other seasons differs.

(2)

[26]

TOTAL: 150

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Candidate Barcode Label

Senior Certificate/National Senior Certificate (Grade 12) – May/June 2026 Confidential

CENTRE NUMBER							
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BOOK NUMBER		OF		BOOKS
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SUBJECT CODE	M	L	I	T	
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PAPER NUMBER	1
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SUBJECT NAME	MATHEMATICAL LITERACY
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[illegible][illegible]

CONTROLLED AND CERTIFIED CORRECT (SURNAME AND INITIALS OF EA)		READ INSTRUCTIONS ON THE NEXT PAGE.
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This answer book consists of 17 pages.

FOLLOW THESE INSTRUCTIONS CAREFULLY.

1. Clearly write your examination number and centre number in the spaces provided and attach your barcode label in the space provided.
2. Remember that your own name (or the name of your school) may not appear anywhere on this ANSWER BOOK.
3. Answer ALL the questions in the spaces provided in this ANSWER BOOK ONLY. If you require additional space for your answers:
 - 3.1 Use the additional space provided at the end of the ANSWER BOOK.
 - 3.2 When answering a question in the additional space, indicate clearly the question number in the column on the left-hand side.
4. No pages may be torn from this ANSWER BOOK.
5. Candidates may not retain the ANSWER BOOK or remove it from the examination room.
6. Write the answers in black/blue ink as distinctly as possible.
7. Do not write in the margins.
8. Draw a neat line through any work/rough work that must NOT be marked.

QUESTION 1

	Solution	Marks
1.1.1		(2)
1.1.2		(2)
1.1.3		(2)
1.1.4		(2)
1.1.5		(2)
1.2.1		(2)
1.2.2		(3)
1.2.3		(2)
1.2.4		(3)
1.3.1		(2)
1.3.2		(2)
1.3.3		(2)
1.3.4		(3)
		[29]

QUESTION 2

ANNEXURE A

QUESTION 2.1

		Shoprite Checkers (Pty) Ltd VAT number: 4420106777 Registration number: 1929/001817/07 Corner William Dabbs Street and Old Paarl Road Brackenfell 7560, Western Cape	
		Tax Invoice Invoice No.: INV 130495399	
YOUR DETAILS: Customer Name: Katleho Mullah Xtra Savings Card Nr. 9710084039		Thank you for shopping with us! ORDER DETAILS: Order number: 130495399A Delivery Date and Time: 3/11/2024, 18:31	
Product Details # English Cucumber Single # Queen Pineapple 2 pack **Save 15%** 6 piece Chicken Fillets per kg Yoghurt 1 kg **Buy 2 for R69** # Frzo Frozen Blueberries 500 g **Buy 2 and Save R30** # Sweet Potatoes bag 1 kg # Coconut Oil 1 ℓ **Now R54,99** Tuna in Water 170 g # Zero-rated for VAT	QTY 1 1 0,88 kg 2 2 1 1 1 1	Unit Price R16,99 R29,99 R70,55 B R69,99 R27,99 R74,99 R21,99	Total R16,99 R29,99 A R70,55 ... – R16,98 R139,98 – R30,00 R27,99 R74,99 – R20 R21,99
Product Total including 15% VAT Delivery Fee (additional fee to have items delivered)	R396,98 R35,00		
TOTAL	***		
VAT amount:	R21,07		
Payment Summary Total payment made Wallet credit from previous purchase	C R61,05		
NOTE: A wallet credit is money that is credited from a previous purchase and must be used for the current purchase.			
[Adapted from original invoice]			

	Solution	Marks
2.1.1		(2)
2.1.2		(2)
2.1.3		(3)
2.1.4		(4)
2.1.5		(2)

	Solution		Marks
2.2.1			(3)
2.2.2			(2)
2.2.3			(4)
2.2.4			(5)
2.3.1			(2)
2.3.2	(i)	(ii)	(2)
2.3.3			(3)
			[34]

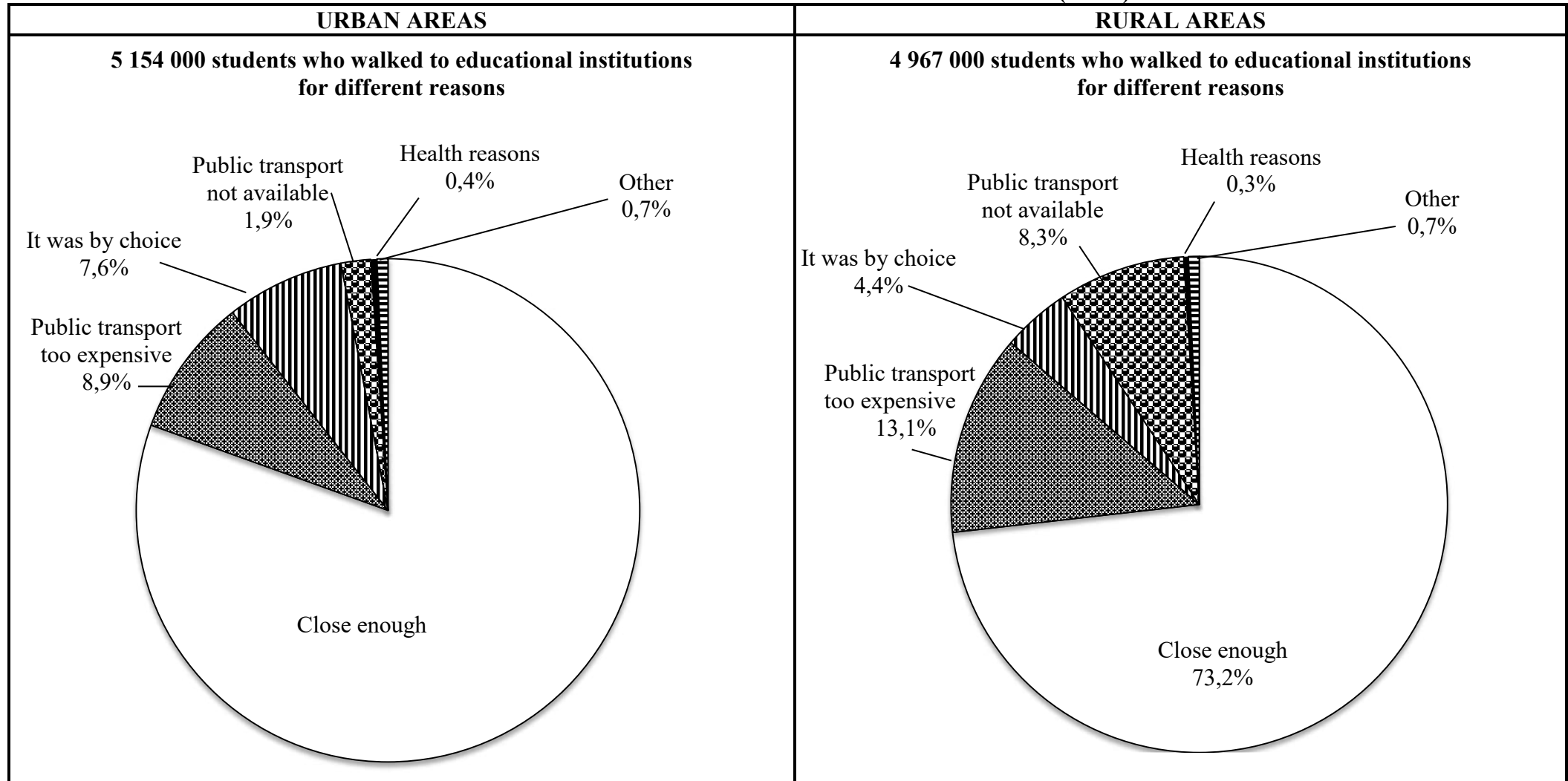
QUESTION 3

3.1	Solution	Marks
3.1.1		(2)
3.1.2		(2)
3.1.3		(3)
3.1.4		(2)
3.1.5		(5)
3.1.6		(2)

ANNEXURE B

QUESTION 3.2

REASONS WHY STUDENTS WALKED TO EDUCATIONAL INSTITUTIONS DURING 2020 (IN %)



[Adapted from www.statssa.gov.za]

	Solution	Marks
3.2.1		(2)
3.2.2		(2)
3.2.3		(5)
3.2.4		(2)
3.2.5		(2)
		[29]

QUESTION 4

ANNEXURE C

QUESTION 4.1

EXTRACT OF AN INCOME AND EXPENDITURE STATEMENT FOR 2022/2023

INCOME (IN THOUSAND RAND)						
	2023			2022		
Sources of income	Estimated	Actual amount collected	Over-collection	Estimated	Actual amount collected	Over-collection
Net RAF fuel levy	48 974 319	49 082 869	108 550	48 105 553	***	389 754
Investments	240 322	697 066	456 744	239 083	284 167	45 084
Other sources		5 011	5 011		2 077	2 077
TOTAL	49 214 641	49 784 946	570 305	48 344 636	48 781 551	436 915

EXPENDITURE (IN THOUSAND RAND)		
Sources of expenditure	2022	2023
Claims paid	43 915 506	43 284 001
Administrative and employee expenditure	2 804 125	3 245 848

[Adapted from www.raf.co.za]

	Solution	Marks
4.1.1		(2)
4.1.2		(3)
4.1.3		(4)
4.1.4		(2)
4.2.1		(3)
4.2.2		(2)
4.2.3		(5)

	Solution	Marks
4.3.1		(4)
4.3.2		(7)
		[32]

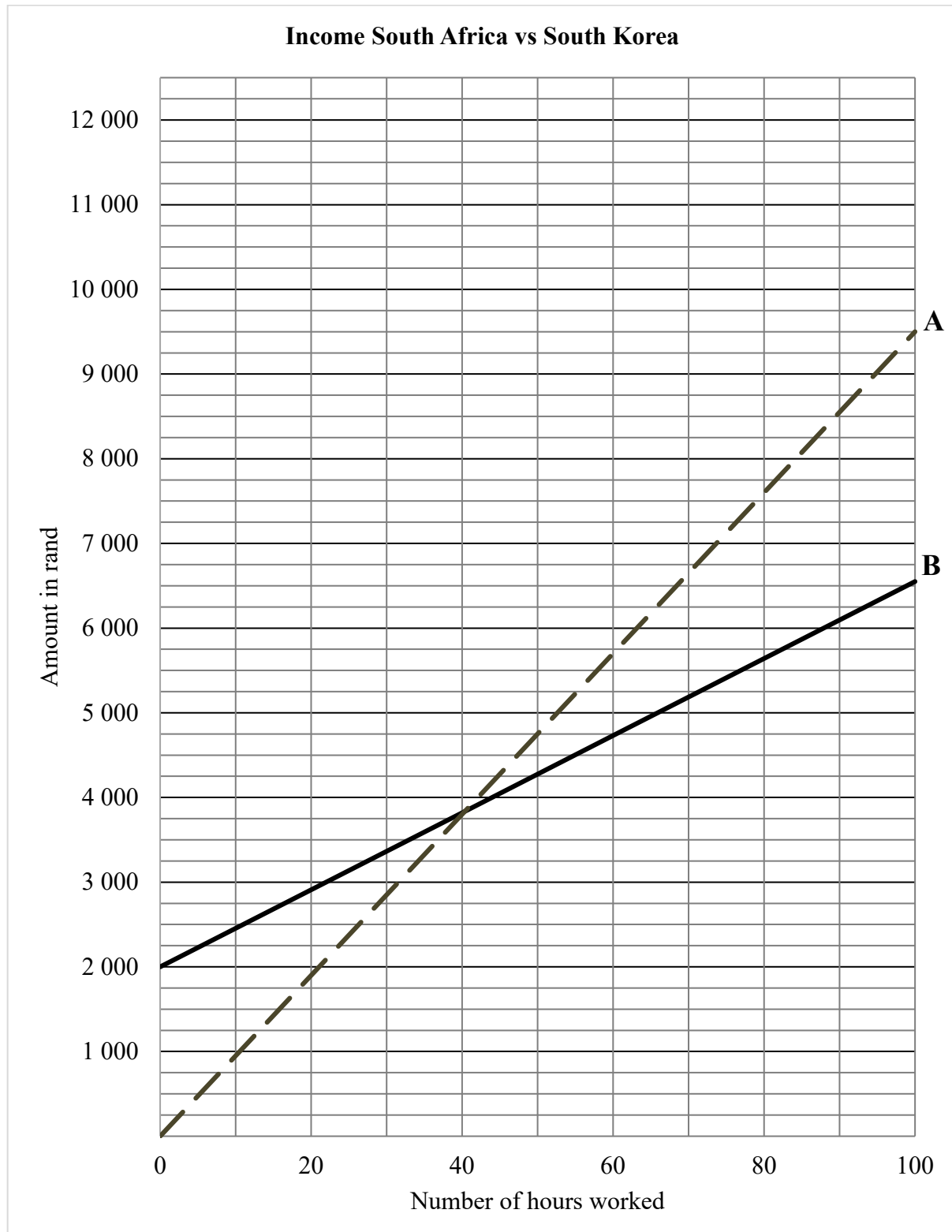
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QUESTION 5

ANNEXURE D

QUESTION 5.1

INCOME GRAPHS RELATING TO TEACHING ENGLISH AS A FOREIGN LANGUAGE TO SOUTH AFRICAN AND SOUTH KOREAN STUDENTS



	Solution	Marks
5.1.1		(2)
5.1.2		(3)
5.1.3		(3)
5.1.4		(2)
5.2.1		(2)
5.2.2		(5)

	Solution	Marks
5.3.1		(7)
5.3.2		(2)
		[26]

TOTAL: 150

[illegible]

RE-MARK/RE-CHECK				
Question	Marks			Initials
1				
2				
3				
4				
5				
TOTAL				
HASH TOTAL				



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**SENIOR CERTIFICATE EXAMINATIONS/
NATIONAL SENIOR CERTIFICATE EXAMINATIONS
SENIORSERTIFIKAAT-EKSAMEN/
NASIONALE SENIORSERTIFIKAAT-EKSAMEN**

MATHEMATICAL LITERACY P1/WISKUNDIGE GELETTERDHEID V1

MAY/JUNE/MEI/JUNIE 2026

MARKING GUIDELINES/NASIENRIGLYNE

MARKS/PUNTE: 150

Symbol/Kode	Explanation/Verduideliking
MA	Method with accuracy/Metode met akkuraatheid
CA	Consistent accuracy/Volgehoue akkuraatheid
A	Accuracy/Akkuraatheid
C	Conversion/Herleiding
S	Simplification/Vereenvoudiging
RT	Reading from a table/graph/document/diagram/Lees vanaf tabel/grafiek/dokument/diagram
SF	Correct substitution in a formula/Korrekte vervanging in 'n formule
O	Opinion/Explanation/Opinie/Verduideliking
P	Penalty, e.g. for no units, incorrect rounding off, etc./Penalisasie, bv. vir geen eenhede, verkeerde afronding, ens.
R	Rounding off/Afronding
NPR	No penalty for rounding/Geen penalisasie vir afronding nie
NPU	No penalty for omitting correct unit/Geen penalisasie vir die uitlos van die korrekte eenheid nie.
AO	Answer only/Slegs antwoord
MCA	Method with consistent accuracy/Metode met volgehoue akkuraatheid
RCA	Rounding consistent with accuracy/Afronding met volgehoue akkuraatheid

**These marking guidelines consist of 21 pages. /
Hierdie nasienriglyne bestaan uit 21 bladsye.**

NOTE:

- If a candidate answers a question TWICE, only mark the FIRST attempt.
- If a candidate has crossed out (cancelled) an attempt to a question and NOT redone the solution, mark the crossed out (cancelled) version.
- Consistent accuracy (CA) applies in ALL aspects of the marking guidelines; however it stops at the second calculation error or break-down.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalise for every extra item presented.
- Rounding is an independent mark.
- General principle of marking, if the candidate makes one mistake one mark is deducted.
- A conclusion mark can only be given if relevant calculations precedes it (at least a $\frac{1}{3}$ of the mark before conclusion).
- No penalty for rounding (NPR) if the first decimal is correct, except questions involving money.

LET WEL:

- *As 'n kandidaat 'n vraag TWEE KEER beantwoord, sien slegs die EERSTE poging na.*
- *As 'n kandidaat 'n antwoord van 'n vraag doodtrek (kanselleer) en nie oordoen nie, sien die doodgetrekte (gekanselleerde) poging na.*
- *Volgehoue akkuraatheid (CA) word in ALLE aspekte van die nasienriglyne toegepas; dit hou egter op by die tweede berekeningsfout of 'break-down'.*
- *Wanneer 'n kandidaat aflesings vanaf 'n grafiek, tabel, uitlegplan en kaart geneem en ekstra antwoorde gee, penaliseer vir elke ekstra item.*
- *Afronding tel as 'n afsonderlike punt.*
- *Die algemene beginsel van merk as 'n leerder een fout maak, word een punt afgetrek.*
- *'n Gevolgtrekkingspunt kan slegs gegee word indien relevante berekeninge dit voorgaan (ten minste 'n $\frac{1}{3}$ van die punt voor die gevolgtrekking).*
- *Geen penalisering vir ronding (NPR) as die eerste desimaal korrek is nie, behalwe as vrae geld insluit.*

QUESTION/VRAAG 1 [29 MARKS/PUNTE] ANSWER ONLY FULL MARKS			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.1.1	D ✓✓A	2A correct letter (2)	D L1 E
1.1.2	E ✓✓A	2A correct letter (2)	F L1 E
1.1.3	B ✓✓A	2A correct letter (2)	D L1 E
1.1.4	G ✓✓A	2A correct letter (2)	D L1 E
1.1.5	H ✓✓A	2A correct letter (2)	F L1 E

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.2.1	R525 202 ✓RT ≈ R530 000 ✓R	1RT correct amount 1R correct rounding (2)	F L1 E
1.2.2	Number of months / <i>Getal maande</i> ✓RT = 8×12 ✓MA = 96 months / <i>maande</i> ✓A	1RT correct value 1MA multiplying by 12 1A simplification (3)	F L1 M
1.2.3	Monthly saving / <i>Maandelikse besparing</i> = R1 000 ✓✓RT	2RT correct amount (2)	F L1 M
1.2.4	Difference / <i>Verskil</i> ✓RT ✓RT = R714 694 – R238 231 = R476 463 ✓A	1RT R714 694 1RT R238 231 1A simplification (3)	F L1 M

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
1.3.1	Discrete data / <i>Diskrete data</i> ✓✓A	2A correct classification (2)	D L1 E
1.3.2	Overseas / <i>Oorsee</i> ✓✓A	2A correct region (2)	D L1 E
1.3.3	Total number of tourists / <i>Totale aantal toeriste</i> ✓RT $= 216\,406 + 245\,787$ $= 462\,193$ ✓A OR / OF Total number of tourists / <i>Totale aantal toeriste</i> $= 40\,927 + 171\,086 + 4\,393 + 36\,180 + 205\,023 + 4\,584$ ✓RT $= 462\,193$ ✓A	1RT both correct values 1A simplification OR / OF 1RT correct values 1A simplification (2)	D L1 E
1.3.4	Number of tourists / <i>Aantal toeriste</i> ✓RT $A = 679\,404 - (58\,166 + 76\,741 + 171\,086 + 205\,023 + 110\,686 + 17\,250)$ ✓MA $A = 679\,404 - 638\,952$ $A = 40\,452$ ✓A OR/OF Number of tourists / <i>Aantal toeriste</i> ✓RT $A = 73\,420 - (31\,782 + 1\,186)$ ✓MA $A = 73\,420 - 32\,968$ $A = 40\,452$ ✓A	1RT 679 404 1MA adding values 1A simplification OR/OF 1RT 73 420 1MA adding values 1A simplification (3)	D L1 E
		[29]	

QUESTION/VRAAG 2 [34 MARKS/PUNTE]			
Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.1.1	Order number / Bestellingsnommer ✓✓RT	2RT reading from table (2)	F L1 E
2.1.2	Discount amount/ Afslag bedrag $= R29,99 \times \frac{15}{100}$ OR / OF $\times 0,15$ ✓MA $= R4,50$ Therefore A = –R4,50 ✓A	1MA calculating 15% 1A simplification Accept: R4,50 AO (2)	F L1 E
2.1.3	✓RT B = R69,00 + R16,98 $= R85,98$ $= R85,98 \div 2$ ✓MCA $= R42,99$ ✓CA OR / OF ✓RT B = (R69,00 ÷ 2) + (R16,98 ÷ 2) ✓MCA $= R34,50 + R8,49$ $= R42,99$ ✓CA	1RT R69,00 AND R16,98 1MCA dividing by 2 1CA simplification OR / OF 1RT R69,00 AND R16,98 1MCA dividing by 2 1CA simplification AO (3)	F L2 D
2.1.4	Total payment / Totale betaling $= R396,98 + R35,00$ ✓RT $= R431,98$ ✓A C = R431,98 – R61,05 ✓MCA $= R370,93$ ✓CA	1RT R396,98 AND R35,00 1A simplification 1MCA subtracting values 1CA simplification AO (4)	F L2 M
2.1.5	VAT is not calculated on all amounts / BTW word nie op al die bedrae bereken nie. ✓✓O OR / OF The prices on the slip already include 15% VAT / Die pryse op die strokie sluit reeds 15% BTW in. ✓✓O OR / OF	2O reason OR / OF	F L4 M

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.1.5	R70,55; R42,99 and R21,99 are the only values that include VAT / <i>R70,55; R42,99; R21,99 is die enigste waardes wat BTW insluit.</i> ✓✓O OR / OF Some items are VAT exempt/zero rated / <i>Sommige items sluit geen BTW in nie/nulkoers items.</i> ✓✓O	2O reason	
2.2.1	✓RT $= 45\,000 : 208\,300$ ✓MA $= 1 : 4,63$ ✓CA	1RT correct values 1MA correct order 1CA unit ratio AO (3)	F L2 E
2.2.2	Balance owing / <i>Balans verskuldig</i> $= R208\,300 - R45\,000 - R99\,650$ ✓MA $= R63\,650$ ✓A	1MA subtracting correct values 1A simplification AO (2)	F L1 E
2.2.3	Payment plan 1 / <i>Betaalplan 1</i> $= R9\,000 \times 12$ $= R108\,000$ ✓A Payment plan 2 / <i>Betaalplan 2</i> $= R51\,825 \times 2$ ✓MA $= R103\,650$ ✓CA Difference / <i>Verskil</i> $= R108\,000 - R103\,650$ $= R4\,350$ ✓CA OR / OF	1A R108 000 1MA multiplying by 2 1CA simplification 1CA simplification OR / OF	F L3 M

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.2.3	Payment plan 2 per month / <i>Betaalplan 2 per maand</i> $= R51\,825 \div 6$ ✓MA $= R8\,637,50$ ✓A Difference per month / <i>Verskil per maand</i> $= R9\,000 - R8\,637,50$ $= R362,50$ ✓CA Difference per year / <i>Verskil per jaar</i> $= R362,50 \times 12$ $= R4\,350$ ✓CA OR / OF Payment plan 1 per semester / <i>Betaalplan 1 per semester</i> $= R9\,000 \times 6$ ✓MA $= R54\,000$ ✓A Difference per semester / <i>Verskil per semester</i> $= R54\,000 - R51\,825$ $= R2\,175$ ✓CA Difference per year / <i>Verskil per jaar</i> $= R2\,175 \times 2$ $= R4\,350$ ✓CA	1MA division by 6 1A simplification 1CA simplification 1CA simplification OR / OF 1MA multiplying by 6 1A simplification 1CA simplification 1CA simplification	(4)

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.2.4	Year 1 / Jaar 1 $= R39\,500 \times \frac{7,15}{100} \quad \checkmark \text{MA}$ $= R2\,824,25 \quad \checkmark \text{A}$ Amount end of year 1 / Bedrag einde van jaar 1 $= R39\,500 + R2\,824,25$ $= R42\,324,25 \quad \checkmark \text{MCA}$ Year 2 / Jaar 2 $= R42\,324,25 \times \frac{7,85}{100}$ $= R3\,322,453625 \quad \checkmark \text{CA}$ Amount end of year 2 / Bedrag einde van jaar 2 $= R42\,324,25 + R3\,322,453625$ $= R45\,646,70 \quad \checkmark \text{CA}$ OR / OF Amount end of year 1 / Bedrag einde van jaar 1 $= R39\,500 \times \frac{107,15}{100} \quad \checkmark \text{MA}$ $= R42\,324,25 \quad \checkmark \text{CA}$ Amount end of year 2 / Bedrag einde van jaar 2 $= R42\,324,25 \times \frac{107,85}{100} \quad \checkmark \text{MC}$ $= R45\,646,70 \quad \checkmark \text{CA}$ OR / OF	1MA interest calculation 1A year 1 interest 1MCA balance after year 1 1CA year 2 interest 1CA simplification OR / OF 1A $\frac{107,15}{100}$ 1MA interest calculation 1CA amount year 1 1MCA calculating interest 1CA amount year 2 OR / OF	F L3 M

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.2.4	$= R39\,500 \times \frac{107,15}{100} \times \frac{107,85}{100} \checkmark MC$ $= R45\,646,70 \checkmark CA$	$1A \frac{107,15}{100}$ 1MA interest calculation year 1 1CA amount year 1 1MCA calculating interest year 2 1CA amount year 2 (5)	F L3 M
2.3.1	Possible outcomes / <i>Moontlike uitkomst</i> $= 6 / \text{six} / \text{ses} \checkmark \checkmark A$	$2A$ correct number (2)	P L1 E
2.3.2	(i) Bw / wB $\checkmark A$ (ii) Rb / bR $\checkmark A$	$1A$ correct option $1A$ correct option (2)	P L2 M
2.3.3	Probability / <i>Waarskynlikheid</i> $= \frac{2}{6} \text{ OR } \frac{1}{3} \checkmark A$ $= 0,333 \checkmark CA$	$1A$ numerator $1A$ denominator $1CA$ simplification AO (3)	P L2 M
		[34]	

QUESTION/VRAAG 3 [29 MARKS/PUNTE]			
Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
3.1.1	Survey / Opname ✓✓A OR / OF Questionnaire / Vraelys ✓✓A OR / OF Interview / Onderhoud ✓✓A	2A correct instrument (2)	D L1 E
3.1.2	Western Cape; Gauteng; Mpumalanga; Northern Cape; Eastern Cape; KwaZulu-Natal; North West; Free State; Limpopo / ✓✓A <i>Wes-Kaap; Gauteng; Mpumalanga; Noord-Kaap; Oos-Kaap; KwaZulu-Natal; Noordwes; Vrystaat; Limpopo</i> OR / OF WC; GP; MP; NC; EC; KZN; NW; FS; LP / ✓✓A <i>WK; GP; MP; NK; OK; KZN; NW; VS; LP</i>	2A provinces in correct order (2)	D L2 M
3.1.3	Mean / Gemiddeld ✓MA $= \frac{33\,487 + 16\,140 + 20\,850 + 13\,982 + 15\,834 + 14\,775 + 29\,333 + 21\,964 + 10\,833}{9}$ $= \frac{177\,198}{9} \quad \checkmark \text{MA}$ = R19 688,67 ✓CA	1MA adding ALL 9 values 1MA concept of mean 1CA simplification AO (3)	D L2 E
3.1.4	0 OR 0% OR $\frac{0}{9}$ ✓✓A OR zero / nul OR impossible / onmoontlik	2A correct probability (2)	P L2 E

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
3.1.5	Budget/Begroting $= R21\,964 \times \frac{100}{18,7} \quad \checkmark \text{MA}$ $= R117\,454,545454 \quad \checkmark \text{CA}$ Value of P / Waarde van P $= R117\,454,545454 \times \frac{30,3}{100} \quad \checkmark \text{MC}$ $= R35\,588,73 \quad \checkmark \text{CA}$ The statement is VALID / Die bewering is GELDIG. $\checkmark \text{O}$ OR / OF Value of P / Waarde van P $\checkmark \text{MA}$ $= \frac{R21\,964}{0,187} \times 0,303 \quad \checkmark \text{MC} \quad \checkmark \text{CA}$ $= R35\,588,73 \quad \checkmark \text{CA}$ The statement is VALID/Die bewering is GELDIG. $\checkmark \text{O}$ OR / OF Value of P / Waarde van P P : 30,3 $21\,964 : 18,7 \quad \checkmark \text{MA}$ $\checkmark \text{CA}$ $= \frac{30,3}{18,7} \times 21\,964 \quad \checkmark \text{MC}$ $= R35\,588,73 \quad \checkmark \text{CA}$ The statement is VALID / Die bewering is GELDIG. $\checkmark \text{O}$	1MA reverse percentage calculation 1CA simplification 1MCA percentage calculation 1CA simplification 1O conclusion OR / OF 1MA reverse percentage calculation 1MCA percentage calculation 1CA simplification 1CA simplification 1O conclusion OR / OF 1MA concept of ratio 1CA simplification 1MCA percentage calculation 1CA simplification 1O conclusion	D L4 D (5)

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
3.1.6	The total household budget amount is higher / <i>Die totale huishoudelike begroting bedrag is meer.</i> ✓✓O OR / OF Average income per household is higher / <i>Gemiddelde inkomste per huishouding is hoër.</i> ✓✓O	2O reason (2)	D L4 M
3.2.1	Pie graph OR Pie chart ✓✓A <i>Sirkelgrafiek OF Sirkeldiagram</i>	2A correct graph (2)	D L1 E
3.2.2	Public transport too expensive / <i>Openbare vervoer te duur.</i> ✓✓A	2A correct reason (2)	D L1 E
3.2.3	Nearby / close enough / <i>Naby / naby genoeg</i> ✓RT $= 100\% - (8,9 + 7,6 + 1,9 + 0,4 + 0,7)$ $= 100\% - 19,5\%$ ✓A $= 80,5\%$ ✓CA Number of students / <i>Aantal studente</i> $= 5\,154\,000 \times \frac{80,5}{100}$ ✓MC $= 4\,148\,970$ ✓CA OR / OF $= 8,9 + 7,6 + 1,9 + 0,4 + 0,7$ ✓RT $= 19,5\%$ ✓A Students not walking / <i>Studente wat nie loop nie</i> $= 5\,154\,000 \times 19,5\%$ $= 1\,005\,030$ ✓CA Students walking / <i>Studente wat loop</i> $= 5\,154\,000 - 1\,005\,030$ ✓MC $= 4\,148\,970$ ✓CA	1RT all correct values 1A 19,5% 1CA simplification 1MCA calculating 80,5% 1CA simplification OR / OF 1RT all correct values 1A 19,5% 1CA simplification 1MCA subtracting 1CA simplification (5)	D L2 M

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
3.2.4	Fewer people in rural areas / <i>Minder mense in landelike gebiede.</i> ✓✓O OR / OF Most people are walking to their destination / <i>Meeste mense loop na hul eindbestemming.</i> ✓✓O OR / OF Some rural areas not suitable for public transport / <i>Sekere landelike gebiede nie geskik vir publieke vervoer nie.</i> ✓✓O OR / OF Inaccessible roads due to lack of transport infrastructure / <i>Ontoeganklike paaie as gevolg van swak infrastruktuur.</i> ✓✓O OR / OF Rural areas have vast distances making it financially non beneficial / <i>Landelike gebiede het groot afstande wat dit finansieël nie voordelig maak nie</i> ✓✓O OR / OF Fewer options of public transport available in rural areas / <i>Landelike gebiede het minder opsies van openbare vervoer beskikbaar</i> ✓✓O	20 reason (2)	D L4 D
3.2.5	Probability / <i>Waarskynlikheid</i> $= 0,3\% \text{ OR } \frac{0,3}{100}$ $= \frac{3}{1\,000} \quad \checkmark A$ OR / OF Probability / <i>Waarskynlikheid</i> $= \frac{14\,901}{4\,967\,000} \quad \checkmark A$	1A numerator 1A denominator (2)	P L2 M
		[29]	

QUESTION/VRAAG 4 [32 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.1.1	Forty-nine billion two hundred and fourteen million six hundred and forty-one thousand (rand) / ✓✓A <i>Nege en veertig miljard twee honderd en veertien miljoen ses honderd een en veertig duisend (rand).</i>	2A amount in words (2)	F L1 E
4.1.2	Amount collected / <i>Bedrag ingevorder</i> ✓RT ✓MA $= R48\ 781\ 551\ 000 - (R284\ 167\ 000 + R2\ 077\ 000)$ $= R48\ 495\ 307\ 000 / R48\ 495\ 307\ \text{thousand}$ ✓CA OR / OF Amount collected / <i>Bedrag ingevorder</i> ✓RT $= R48\ 105\ 553\ 000 + R389\ 754\ 000$ ✓MA $= R48\ 495\ 307\ 000$ ✓CA	1RT table value 1MA adding and subtracting 1CA simplification OR/OF 1RT table value 1MA adding R389 754 000 1CA simplification (3)	F L2 E
4.1.3	Number of claims / <i>Aantal eise</i> ✓RT $= \frac{R43\ 284\ 001\ 000}{R261\ 721}$ ✓MA $= 165\ 382,2238$ ✓CA $= 165\ 382$ ✓R	1RT table value 1MA dividing correct value 1CA simplification 1R correct rounding (4)	F L3 E
4.1.4	Salary / <i>Salaris</i> ✓✓O OR / OF Transport / <i>Vervoer</i> ✓✓O	2O correct expenditure (2)	F L4 E

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.2.1	Range / Omvang $\checkmark$ RT $= 2\,056 - 256 \checkmark$ MA $= 1\,800 \checkmark$ CA	1RT 2 056 AND 256 1MA concept of range 1CA simplification (3)	D L2 E
4.2.2	She was on leave / Sy was met verlof. $\checkmark\checkmark$ O OR / OF Centres were closed / Sentrums was gesluit. $\checkmark\checkmark$ O	2O reason (2)	D L4 D
4.2.3	Amount claimed in cents / Bedrag geëis in sent $\checkmark$ RT $= 2\,590 \text{ km} \times 164,3\text{c} \checkmark$ MA $= 425\,537 \text{ c} \checkmark$ A Amount claimed in rand / Bedrag geëis in rand $= \frac{425\,537\text{c}}{100}$ $= \text{R}4\,255,37 \checkmark$ CA The claim is NOT VALID / Die bewering is NIE GELDIG NIE. $\checkmark$ O OR / OF Amount claimed in rand / Bedrag geëis in rand $= \frac{164,3}{100} \times 2\,590 \checkmark$ RT $\checkmark$ A $= \text{R}1,643 \times 2\,590 \checkmark$ MA $= \text{R}4\,255,37 \checkmark$ CA The claim is NOT VALID / Die bewering is NIE GELDIG NIE. $\checkmark$ O	1RT 2 590 km 1MA multiplying 1A amount in cents 1CA simplification 1O conclusion (if converted to rand) OR / OF 1RT 2 590 1A R1,643 1MA multiplying by 2 590 1CA simplification 1O conclusion (if converted to rand) (5)	F L4 M

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.3.1	Monthly amount / <i>Maandelikse bedrag</i> ✓RT $= R728 + (R246 \times 2)$ ✓MA $= R728 + R492$ $= R1\,220$ ✓CA Annual amount / <i>Jaarlikse bedrag</i> $= R1\,220 \times 12$ $= R14\,640$ ✓CA OR / OF Monthly amount / <i>Maandelikse bedrag</i> ✓RT $= (R364 \times 2) + (R246 \times 2)$ ✓MA $= R728 + R492$ $= R1\,220$ ✓CA Annual amount / <i>Jaarlikse bedrag</i> $= R1\,220 \times 12$ $= R14\,640$ ✓CA	1RT correct value (R728) 1MA multiplying by 2 1CA simplification 1CA simplification OR / OF 1RT correct value (R364) 1MA multiplying by 2 1CA simplification 1CA simplification	F L3 M (4)

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
4.3.2	Annual taxable income / <i>Jaarlikse belasbare inkomste</i> $= R101\,027,08 \times 12$ $= R1\,212\,324,96$ ✓A Annual tax payable before rebates / <i>Jaarlikse belasting betaalbaar voor kortings</i> ✓A $= R251\,258 + 41\% \text{ of the taxable income above } 857\,900$ $= R251\,258 + 41\% (R1\,212\,324,96 - R857\,900)$ ✓SF $= R251\,258 + (41\% \times R354\,424,96)$ $= R251\,258 + R145\,314,23$ $= R396\,572,23$ ✓CA Annual tax payable after rebates / <i>Jaarlikse belasting betaalbaar na kortings</i> ✓RT $= R396\,572,23 - R17\,235 - R14\,640$ ✓MC $= R364\,697,23$ ✓CA	CA from Question 4.3.1 1A annual taxable income 1A correct tax bracket 1SF substituting into formula 1CA simplification 1RT R17 235 1MCA subtracting MTC 1CA simplification (7)	F L3 M
		[32]	

QUESTION/VRAAG 5 [26 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
5.1.1	Income/ <i>Inkomste</i> $= R95,00 \times 15$ ✓MA $= R1\,425,00$ ✓A	1MA multiplying values 1A simplification (2)	F L2 M
5.1.2	Total income/ <i>Totale inkomste</i> ✓RT ✓A $= R2\,000 + (R45,50 \times \text{number of hours})$ ✓MA	1RT fixed cost (R2 000) 1A variable cost (R45,50) in formula 1MA $\times$ number of hours (3)	F L2 M
5.1.3	A ✓A Graph starts at R0 for zero hours / <i>Die grafiek begin by R0 vir geen ure.</i> ✓✓O OR / OF The graph starts at 0;0 / <i>Die grafiek begin by 0;0.</i> ✓✓O OR / OF Steeper gradient / <i>Steiler gradiënt</i> ✓✓O OR / OF No fixed/ basic amount / <i>Geen vaste/ basiese bedrag</i> ✓✓O	1A correct graph 2O reason (3)	F L4 M
5.1.4	Number of hours / <i>Aantal ure</i> $= 40 \text{ hours / ure}$ ✓✓RT	2RT 40 hours Accept: 39 – 41 (2)	F L2 M

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
5.2.1	50th percentile / 50^{ste} persentiel = 40 learners/leerders ✓✓RT	2RT 40 learners (2)	D L2 E
5.2.2	Quartile 1/Kwartiel 1 IQR = Q3 – Q1 ✓RT 23 = 46 – Q1 ✓MA Q1 = 46 – 23 ✓MC Q1 = 23 ✓CA Rory's statement is NOT VALID / Rory se bewering is NIE GELDIG NIE. ✓O	1RT value of Q3 (46) 1MA concept of IQR 1MCA changing the subject of the formula 1CA simplification 1O conclusion (5)	D L4 D
5.3.1	Block 1 / Blok 1 = 200 kWh × 112 ₪ ✓MA = 22 400 ₪ ✓CA Block 2 / Blok 2 = 125 kWh × 206,60 ₪ = 25 825 ₪ ✓CA Total cost in ₪ / Totale koste in ₪ = 22 400 ₪ + 25 825 ₪ + 1 600 ₪ ✓MC = 49 825 ₪ ✓CA Total cost in rand / Totale koste in rand R1: ₪ 78,07 = $\frac{49\,825}{78,07} \times 1$ ✓MC = R638,21 ✓CA OR / OF	1MA multiplying by tariff 1CA cost block 1 1CA cost block 2 1MCA adding all values 1CA total cost in KRW 1MCA dividing by exchange rate 1CA simplification OR / OF	F L3 D

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
5.3.1	Converting to Rand / <i>Herlei na Rand</i> Block 1 / Blok 1 $= 112,00 \text{ ₪} \div 78,07 \checkmark \text{MA}$ $= \text{R}1,4346 \checkmark \text{CA}$ Block 2 / Blok 2 $= 206,60 \text{ ₪} \div 78,07 \checkmark \text{MC}$ $= \text{R}2,6463$ Block 2 demand / Blok 2 aanvraag $= 1\,600 \text{ ₪} \div 78,07$ $= \text{R}20,4944$ Block 1 / Blok 1 $= 200 \text{ kWh} \times \text{R}1,43$ $= \text{R}286,92 \checkmark \text{CA}$ Block 2 / Blok 2 $= 125 \text{ kWh} \times \text{R}2,65$ $= \text{R}330,7875 \checkmark \text{CA}$ Total cost / Totale koste $= \text{R}286,92 + \text{R}330,7875 + \text{R}20,4944 \checkmark \text{MC}$ $= \text{R}638,20 \checkmark \text{CA}$	1MA dividing by exchange rate 1CA simplification 1MCA dividing by tariff 1CA cost block 1 1CA cost block 2 1MCA adding all values 1CA simplification	(7)
5.3.2	$\checkmark \text{O}$ The demand will increase in winter, and so does the cost / <i>Die aanvraag sal verhoog in die winter dus die koste ook.</i> $\checkmark \text{O}$ OR / OF $\checkmark \text{O}$ People will use more in other seasons, so the higher cost will try keep people from using too much electricity / <i>Mense sal meer gebruik in ander seisoene so met die hoë koste sal dit voorkom dat hulle meer elektrisiteit gebruik.</i> $\checkmark \text{O}$ OR / OF $\checkmark \text{O}$ $\checkmark \text{O}$ Solar energy is more readily available in summer / <i>Sonkrag is meer geredelik beskikbaar in die somer.</i> OR / OF	1O increase usage / demand 1O increase in cost	F L4 M

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
5.3.2	✓O ✓O In winter, households use more electricity for heaters / geysers / <i>In die winter gebruik huishoudings meer elektrisiteit vir verwarmers / geisers.</i> OR / OF ✓O ✓O Keeping lights on longer due to natural light / <i>Om ligte langer aan te hou as gevolg van natuurlike lig.</i> OR / OF ✓O ✓O In summer people use less electricity / <i>In die somer gebruik mense minder elektrisiteit.</i>		
		(2)	
		[26]	
		TOTAL/TOTAAL: 150	