



NATIONAL SENIOR CERTIFICATE

GRADE 12

SEPTEMBER 2026

MATHEMATICAL LITERACY P1

MARKS: 150

TIME: 3 hours

This question paper consists of 11 pages and a SPECIAL ANSWER BOOK
of 14 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FIVE questions. Answer ALL the questions.
2. Answer ALL the questions ONLY in the SPECIAL ANSWER BOOK.
3. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
4. Show ALL your calculations.
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 ANNEXURE A in the ANSWER BOOK shows a summary of Mrs Peter's car insurance policy.

Use ANNEXURE A to answer the questions that follow.

- 1.1.1 Write down the policy number of Mrs Peter's policy. (2)
- 1.1.2 Determine the missing value **A**, the total premium including VAT. (2)
- 1.1.3 Mrs. Peter's car was hit by a storm. The incident occurred between 22:00 and 06:00. The quotation for the damages from the panel beaters was R18 500.
Determine the amount the insurance company will pay the panel beaters. (2)
- 1.1.4 Write down the anniversary date of the insurance. (2)
- 1.2 State whether the following data sets are **categorical**, **discrete** or **continuous**.
- 1.2.1 The mass of new born babies in one hospital. (2)
- 1.2.2 The number of new multiple-choice questions Jerry answered correctly. (2)
- 1.2.3 The type of transport that Grade 12 learners take to school. (2)
- 1.3 Table 1 below shows the four-day weather forecast.

TABLE 1: FOUR-DAY WEATHER FORECAST

Day	Saturday	Sunday	Monday	Tuesday
High temperature	21°	30°	21°	21°
Low temperature	12°	15°	13°	14°
Chances of precipitation	80%	95%	10%	5%

Use TABLE 1 to answer the following question.

- Identify the day it is most likely to rain. (2)

- 1.4 Lina is a young designer. Her sewing machine broke and she shopped around in order to buy a new one. The machine that she purchased cost R6 000,00.

She asked her father for a loan in order to purchase the machine. Her father's offer was as follows: 10% simple interest per annum for 36 months.

Use the information above to answer the following questions.

- 1.4.1 Calculate how much Lina will pay back to her father, if he wants her to pay back the loan at R216,67 per month. (2)

- 1.4.2 Calculate the profit Lina's father will make on the loan. (2)

- 1.5 A store buys a shirt for R200,00 and adds R20,00 for transport, R13,00 for packaging, and R30,00 for overheads.

- 1.5.1 Determine the total cost of the shirt. (2)

- 1.5.2 If the store sells the shirt for R350,00, calculate the profit the shop received. (2)

- 1.5.3 Explain the meaning of the term *profit*. (2)

- 1.5.4 Write the amount spent on packaging, as a ratio, to the amount spent on overheads. (2)

[28]

QUESTION 2

- 2.1 Mrs. Nair runs a small business making aprons. She pays R1 000,00 for rent. The material for each apron is R15,00 and she sells her aprons for R65,00 each.

TABLE 2 below shows the break-even analysis of Mrs Nair's business.

TABLE 2: BREAK-EVEN ANALYSIS OF MRS NAIR'S BUSINESS

Number of aprons produced	0	10	20	30	40	50
Fixed costs (Rands)	1 000	1 000	1 000	A	1 000	1 000
Variable costs (Rands)	0	150	300	375	600	750
Total costs (Rands)	1 000	1 150	B	1 375	1 600	1 750
Income from sales (Rands)	0	650	1 300	1 950	2 600	3 250

Use TABLE 2 above to answer the questions that follow.

- 2.1.1 Determine the formula for calculating the fixed cost in the form:

$$\text{Fixed Cost} = \dots \quad (2)$$

- 2.1.2 Determine the values of A and B. (3)

- 2.1.3 In the ANSWER BOOK, ANNEXURE B, the graph of income from sales is drawn. On the same set of axes, draw the graph for fixed costs and the graph for total costs. (5)

- 2.1.4 Use your graph in QUESTION 2.1.3 to shade the region where Mrs Nair fails to break-even. (2)

- 2.2 The exchange rate between South Africa and the United Kingdom on 12 November 2025 is shown below.

GBP to ZAR	
1 GBP	22,4436 ZAR

Use the above information to answer the questions that follow.

- 2.2.1 State whether the rand is weaker or stronger than the British pound. (2)

- 2.2.2 On 02 November 2025 the exchange rate of the pound (GBP) to the South African rand was 1 GBP/22,683 ZAR.

Determine the difference, in rands, that you would get if you exchanged 1 375 GBP at the rates given above. (6)

2.3 The price for a 5 kW solar panel system was R110 000,00 in June 2024. The price of the same item was R124 000,00 in June 2025.

2.3.1 Write down the word used to describe the price change on a year-to-year basis. (2)

2.3.2 Calculate the percentage price change on a year-to-year basis on the solar panel system. (Round your answer to the nearest percentage) (4)

2.4 Lindiwe wants to buy a car that cost R180 000,00. A bank offers a 3-year loan deal, with 15% deposit, 11% interest per annum compounded annually, and a residual value of 25% of the cost of the car.

Determine the total amount Lindiwe will pay if she wants to own the car. (7)

[33]

QUESTION 3

3.1 TABLE 4 below shows the number of registered vehicles in March 2023 to March 2024.

TABLE 4: NUMBER OF REGISTERED VEHICLES IN MARCH 2023 TO MARCH 2024

MOTORISED VEHICLES	NUMBER OF REGISTERED MARCH 2023	NUMBER OF REGISTERED MARCH 2024
Motorcars	7 727 988	7 837 771
Minibuses	350 680	356 164
Buses	64 298	64 994
Motorcycles	347 621	350 405
LDV's Bakkies	2 670 338	2 701 912
Trucks	386 641	393 725
Other and unknown	237 504	239 469
Total motorised vehicles	11 785 070	...

Use TABLE 4 above to answer the questions that follow.

3.1.1 Write the total number of vehicles registered in March 2023, in words. (2)

3.1.2 Calculate the difference between the motorcars registered in March 2023 and March 2024. Give your answer to the nearest thousand. (3)

3.1.3 Express the number of registered motorcycles in March 2024 as a percentage of the total motorised vehicles in March 2024. (5)

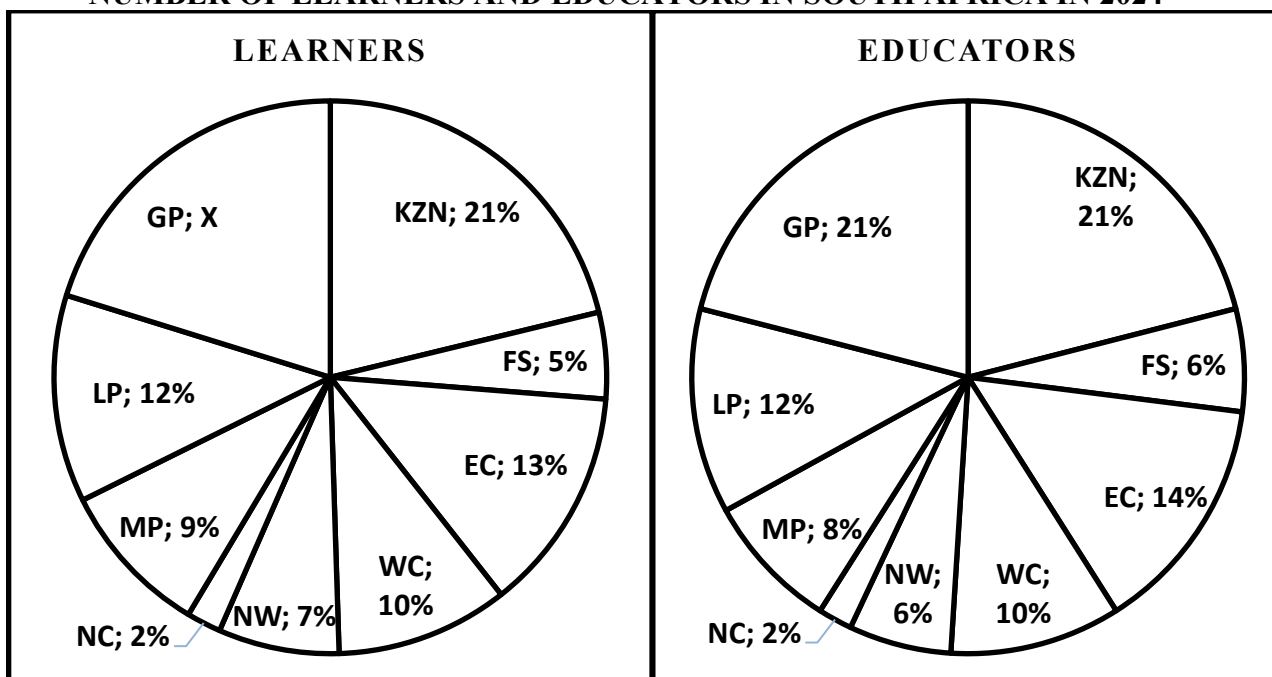
3.1.4 Determine the probability of randomly selecting motorised vehicles registered in March 2023 that are more than 400 000 but less than 500 000. (2)

3.1.5 Arrange the number of vehicles registered in March 2024 in descending order. (2)

3.1.6 The transport officer claimed that the interquartile range of vehicles registered in March 2023 is 2 432 834.

Verify if the statement made by the transport officer is VALID. (4)

- 3.2 In South Africa in 2024 there were 459 993 educators and 13 527 283 learners. Study the information displayed in the pie charts below and answer the questions that follow.

NUMBER OF LEARNERS AND EDUCATORS IN SOUTH AFRICA IN 2024

- 3.2.1 Name the provinces that have the same percentage in the number of educators and learners. (2)
- 3.2.2 Identify ONE type of graph where the information of the above two charts can be shown together. (2)
- 3.2.3 Calculate the number of learners in GP. (3)
- 3.2.4 Determine the percentage range of learners in 2024. (2)
- 3.2.5 If the national average in South Africa is 1 teacher per 30 learners, state which of the two provinces, Eastern Cape or Limpopo, are above or below this average.

Use the information below:

- Eastern Cape: 61 673 educators; 1 782 431 learners
- Limpopo: 55 336 educators; 1 819 118 learners

(5)
[32]

QUESTION 4

4.1 Nancy is 42 years old. She earns a gross salary of R23 500 per month.

4.1.1 Calculate the amount of tax Nancy pays per month. (5)

4.1.2 Nancy received a new job offer. She claims that the new job would increase her tax to R4 100,00 per month if her salary is the maximum amount in tax bracket 2.

Verify if the statement is VALID. (7)

4.2 Qeqe High School entered eight of their ten learners in a debate competition. The scores for the first round are given below.

17; 19; 20; 18; A; 17 ; 19; 18

4.2.1 Write down the instrument used to collect the scores for the first round. (2)

4.2.2 The average score of eight learners is 18. Calculate the value of A. (6)

4.2.3 Complete the following statement:

The unusually high or low number that influences the mean is called ... (2)

4.3 The 2026 national budget for South Africa is set at R2,67 trillion, with education receiving the largest allocation of R520,3 billion. The education budget will focus on improving learning outcomes, expanding access to education, and upgrading infrastructure.

TABLE 6 below shows the education budget of South Africa for 2026/2027.

TABLE 6: EDUCATION BUDGET OF SOUTH AFRICA FOR 2026/2027

EDUCATION BUDGET OF SOUTH AFRICA (IN RAND)	
Basic Education	332,3 billion
National Student Financial Aid Scheme (NSFAS)	55,4 billion
School Infrastructure	15,3 billion
Early Childhood Development (ECD)	1,7 billion

Use TABLE 6 above to answer the questions that follow.

4.3.1 Write the national budget of 2,67 trillion in full. (2)

4.3.2 If the government had an extra R100 million, which category would you prioritise? Give a reason for your answer. (3)

4.3.3 Explain the term *budget* in the context above. (2)

4.3.4 Write down the item which received the second least money from the education budget. (2)

4.3.5 Determine the probability, as a decimal, of randomly selecting a sector in the education budget with less than 2 billion. (3)

[34]

QUESTION 5

- 5.1 TABLE 7 below gives definition of terminology used in Mathematical Literacy.

TABLE 7: DEFINITIONS OF TERMINOLOGY USED IN MATHEMATICAL LITERACY

LETTER	DEFINITION
A	A fund set up to provide income upon retirement
B	Investment fund whereby a person makes a monthly deposit
C	The percentage that is used to calculate the amount of interest that is either earned or charged

Use TABLE 7 above and match a definition with the terminology below.
Write only the letter (A–C) next to the question numbers (5.1.1 to 5.1.2)

5.1.1 Interest rate (2)

5.1.2 Pension fund (2)

- 5.2 A sample of marks scored by Grade 11 learners on a baseline test are represented in the stem and leaf table below.

TABLE 8: STEM AND LEAF TABLE

6	2 2 7 8
7	0 4 5 9
8	1 1 1 5
9	3 4
Key 5 2 = 52	

5.2.1 Write down the mode of the values. (2)

5.2.2 Determine the median of the values given in the stem and leaf table. (3)

- 5.3 Noxie received her first salary slip. Her basic salary is R18 000. She receives a housing subsidy of R1 200 per month and a cellphone allowance of R200. The UIF amount that was deducted from her salary was R194,00.

5.3.1 Noxie states that her deductions were calculated incorrectly.

Verify, with calculation, whether Noxie's statement is VALID. (3)

5.3.2 Identify the mistake on Noxie's salary slip. (2)

5.4

Paul and his twin sister, Nova, are relocating to Ekurhuleni to start new jobs there. They want to share a flat that is valued at R300 000. They want to share the rent equally. They expect to use about 300 kWh of electricity and 40 kℓ of water, of which 75% of water is used for sewage discharge. The property owner will collect a weekly fee of R35,00 for refuse collection.

Nova says she will be paying for water and sewage disposal, while Paul will pay for refuse collection and the electricity used monthly.

TABLE 9 below shows the tariff rate for water and sewage disposal.

TABLE 9: TARIFF RATE FOR WATER AND SEWER SUPPLY FOR 2025/2026

BLOCK	KILOLITERS	TARIFF FOR WATER (EXCL. VAT)	TARIFF FOR SEWAGE (EXCL. VAT)
1	0–6 kℓ	R26,12	R30,89
2	7–15 kℓ	R43,04	R24,71
3	16–30 kℓ	R52,73	R10,50
4	31–45 kℓ	R65,62	R9,65
5	46 kℓ or more	R80,90	R6,59

TABLE 10: TARIFF RATE FOR ELECTRICITY FOR 2025/2026

BLOCK	TARIFF A RESIDENTS (kWh)	RATE IN R/KWH (INCL. VAT)
1	0 to 600 kWh	2,5861
2	More than 600 to 700 kWh	4,3956
3	More than 700 kWh	11,4398

Use TABLE 9 and 10 to determine who will pay more money for services each month.

(9)
[23]

TOTAL: 150



Province of the
EASTERN CAPE
EDUCATION

Iphondo leMpuma Kapa: Isebe leMundo
Provinsie van die Oos Kaap: Departement van Onderwys
Porafensie Ya Kapa Dotjhabela: Lefapha la Thuto

NAME:

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

SEPTEMBER 2026

**MATHEMATICAL LITERACY P1
ANSWER BOOK**

Marker					Moderator's Initials															
Question	Mark			Initial	Marks			S M	Marks			D M	Marks			P M	Marks			N M
1																				
2																				
3																				
4																				
5																				
TOTAL																				

This answer book consists of 14 pages.

QUESTION 1.1

ANNEXURE A

O.M		
Car.home.life		
Policyholder	:	Mrs Peter
Policy Number	:	9665450322
Processing Date	:	15/11/2025
Anniversary Date	:	15/08/2026
Debit Date	:	25 th day of each month
REASON	COVER START DATE	COVER END DATE
Mid-term Adjustment	15/11/2025	14/12/2025
SECTIONS	COVER TAKEN	MONTHLY PREMIUM
Motor Vehicles – MFC057ec	Yes	R852,11
Sarina Cover	Yes	R2,02
Buildings	No	R0,00
Household Contents	No	R0,00
Subtotal (VAT exclusive)		R854,13
Total Premium (VAT inclusive)		A
***Excesses		
Basic/Selected	R6 200,00	
Window glass	R1 250,00	
***Standard Additional Excesses		
The incident occurred between 22:00 and 06:00	R6 200,00	

QUESTION 1

	Solution	Marks
1.1.1		(2)
1.1.2		(2)
1.1.3		(2)
1.1.4		(2)
1.2.1		(2)
1.2.2		(2)
1.2.3		(2)
1.3		(2)
1.4.1		(2)
1.4.2		(2)
1.5.1		(2)
1.5.2		(2)
1.5.3		(2)
1.5.4		(2)
		[28]

QUESTION 2

	Solution	Marks														
2.1.1		(2)														
2.1.2		(3)														
2.1.3 AND 2.1.4	BREAK-EVEN ANALYSIS OF MRS NAIR <table><caption>Data points for Break-Even Analysis of Mrs Nair</caption><thead><tr><th>Number of aprons</th><th>Income (Rand)</th></tr></thead><tbody><tr><td>0</td><td>0</td></tr><tr><td>10</td><td>600</td></tr><tr><td>20</td><td>1200</td></tr><tr><td>30</td><td>1800</td></tr><tr><td>40</td><td>2400</td></tr><tr><td>50</td><td>3000</td></tr></tbody></table>	Number of aprons	Income (Rand)	0	0	10	600	20	1200	30	1800	40	2400	50	3000	(5) + (2)
Number of aprons	Income (Rand)															
0	0															
10	600															
20	1200															
30	1800															
40	2400															
50	3000															

	Solution	Marks
2.2.1		(2)
2.2.2		(6)
2.3.1		(2)
2.3.2		(4)

	Solution	Marks
2.4		(7)
		[33]

QUESTION 3

	Solution	Marks
3.1.1		(2)
3.1.2		(3)
3.1.3		(5)
3.1.4		(2)
3.1.5		(2)
3.1.6		(4)

	Solution	Marks
3.2.1		(2)
3.2.2		(2)
3.2.3		(3)
3.2.4		(2)
3.2.5		(5)
		[32]

QUESTION 4.1

2025 TAX YEAR (1 MARCH 2025–28 FEBRUARY 2026)

TAX BRACKET	TAXABLE INCOME (R)	RATES OF TAX (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

REBATES

Primary rebate	R17 235
Secondary rebate – 65 years and older	R9 444
Tertiary rebate – 75 years and older	R3 145

Medical Tax Credit Rates

Medical Scheme contributions	Rebate per month
Tax payer	R364
Tax payer + first dependent	R728
Each additional dependent	R251

	Solution	Marks
4.1.1		(5)
4.1.2		(7)

	Solution	Marks
4.2.1		(2)
4.2.2		(6)
4.2.3		(2)
4.3.1		(2)
4.3.2		
		(3)
4.3.3		
		(2)
4.3.4		(2)
4.3.5		(3)
		[34]

QUESTION 5

	Solution	Marks
5.1.1		(2)
5.1.2		(2)
5.2.1		(2)
5.2.2		(3)
5.3.1		(3)
5.3.2		(2)

	Solution	Marks
5.4		
		(9)
		[23]

TOTAL: 150

Additional Space		



NATIONAL SENIOR CERTIFICATE

GRADE 12

SEPTEMBER 2026

MATHEMATICAL LITERACY P1 MARKING GUIDELINE

MARKS: 150

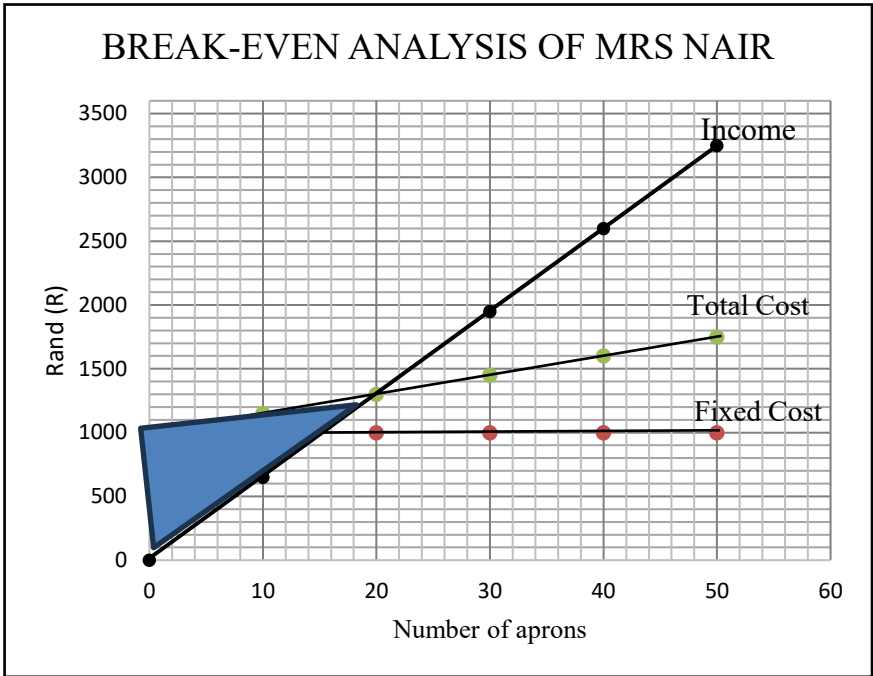
Symbol	Explanation
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table/a graph/document/diagram
SF	Correct substitution in a formula
O	Opinion/Explanation
P	Penalty, e.g. for no units, incorrect rounding off, etc.
R	Rounding off
NPR	No penalty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

This marking guideline consist of 11 pages.

MARKING GUIDELINES**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.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalise for every extra incorrect item presented.

QUESTION 1 [28 marks]			
Ques.	Solution	Explanation	Topic and Level
1.1.1	9665450322 ✓✓A	2A correct answer (2)	F L1
1.1.2	VAT amount = R854,13 x 1,15 ✓MA = R982,25 ✓A OR VAT amount = R854,13 $\times \frac{15}{100}$ ✓MA = R854,13 + R128,13 = R982,25 ✓A	1 multiplying by 1,15 1A answer (2)	F L1
1.1.3	= R18 500,00 - R6 200,00 ✓MA = R12 300 ✓CA	2A Correct amount (2)	F L1
1.1.4	15/08/2026 OR 15 August 2026 ✓✓A	2A Correct date (2)	F L1
1.2.1	Continuous data ✓✓A	2A correct answer (2)	D L1
1.2.2	Discrete data ✓✓A	2A correct answer (2)	D L1
1.2.3	Categorical ✓✓A	2A Correct answer (2)	D L1
1.3	Sunday ✓✓A	2A Correct day (2)	P L1
1.4.1	= R216,67 x 36 ✓MA = R7 800 ✓CA	1MA multiplying by 36 1CA answer (2)	F L1
1.4.2	Difference = R7 800 – R6 000,00 ✓MA = R1 800 ✓CA OR 10% = 0,1 0,1 x R6 000 x 3 ✓MA R600 x 3 R1 800 ✓CA	1MA subtracting correct amounts 1CA answer (2)	F L1
1.5.1	T. Cost = R200,00 + R20,00 + R13,00 + R30,00 ✓MA = R263,00 ✓CA	1MA adding correct values 1CA answer (2)	F L1
1.5.2	Profit = R350,00 - R263,00 ✓MA = R87,00 ✓CA	1MA subtracting correct values 1CA answer (2)	F L1
1.5.3	Profit is the difference between the selling price and cost price ✓✓A (Accept any reasonable answer)	2A definition (2)	F L1
1.5.4	Ratio: 13 : 30 ✓✓A	2A correct ratio (2)	F L1
		[28]	

QUESTION 2 [33 marks]			
Ques.	Solution	Explanation	Topic and Level
2.1.1	Fixed Cost = R1 000,00 ✓✓A	2A correct formula (2)	F L2
2.1.2	A = R1 000,00 ✓A B = R1 000,00 + R300,00 ✓MA = R1 300,00 ✓A OR B = R1 000,00 + (R15 x 20) ✓MA = R1 300,00 ✓A	1A correct amount 1MA adding correct values 1A answer (3)	F L1
2.1.3	 BREAK-EVEN ANALYSIS OF MRS NAIR	1A first point (total costs graph) 1A last point (total cost graph) 1A first point fixed cost graph 1A last point fixed cost graph 1A for two points correctly plotted (total cost) (5)	F L3
2.1.4	Shading the lower region before 20 aprons ✓✓CA	2A correct shading (2)	F L2
2.2.1	Rand is weaker than Pound ✓✓A	2A correct explanation (2)	F L2

2.2.2	Previous exchange rate: $1 \text{ GBP} = 22,683 \text{ ZAR}$ $1\,375 \text{ GBP} = ?$ $? = \frac{1\,375 \text{ GBP} \times 22,683 \text{ ZAR}}{1 \text{ GBP}} \checkmark \text{C}$ $? = \text{R}31\,189,13 \checkmark \text{CA}$ Current exchange rate: $1 \text{ GBP} = 22,4436 \text{ ZAR}$ $1\,375 \text{ GBP} = ?$ $? = \frac{1\,375 \times 22,4436 \text{ ZAR}}{1 \text{ GBP}} \checkmark \text{RT}$ $? = \text{R}30\,859,95 \checkmark \text{CA}$ Difference = $\text{R}31\,189,13 - \text{R}30\,859,95 \checkmark \text{MA}$ $= \text{R}329,18 \checkmark \text{CA}$	1C correct conversion 1CA simplification 1RT reading correct conversion from the table 1CA simplification 1MA subtracting correct values 1CA difference (6)	F L4
2.3.1	Inflation $\checkmark \checkmark \text{A}$	2A answer (2)	F L1
2.3.2	Difference = $\text{R}124\,00,00 - \text{R}110\,000,00 \checkmark \text{MA}$ $= \text{R}14\,000,00 \checkmark \text{CA}$ % increase = $\frac{\text{R}14\,000,00}{\text{R}110\,000,00} \times 100 \checkmark \text{MA}$ $= 12,7272\%$ $= 13\% \checkmark \text{R}$	1MA subtraction 1CA answer 1M multiplying by 100 1CA correct percentage 1R rounding (4)	F L3
2.4	Deposit = $\text{R}180\,000,00 \times \frac{15}{100}$ $= \text{R}27\,000,00 \checkmark \text{MA}$ Residual = $\text{R}180\,000,00 \times \frac{25}{100}$ $= \text{R}45\,000,00 \checkmark \text{CA}$ Loan amount = $\text{R}180\,000,00 - (\text{R}27\,000,00 + \text{R}45\,000,00)$ $= \text{R}108\,000,00 \checkmark \text{MA}$ 1st year = $\text{R}108\,000 \times 1,11$ $= \text{R}119\,880 \checkmark \text{MA}$ 2nd year = $\text{R}119\,880 \times 1,11$ $= \text{R}133\,066,80$ 3rd year = $\text{R}133\,066,80 \times 1,11$ $= \text{R}147\,704,15 \checkmark \text{CA}$ Total amount = $\text{R}147\,704,15 + \text{R}27\,000,00 + \text{R}45\,000,00 \checkmark \text{MA}$ $= \text{R}219\,704,15 \checkmark \text{CA}$ OR	1MA calculating deposit 1CA calculating residual value 1MA calculating loan amount 1MA calculating interest 1CA calculating interest 1MA adding correct valued 1CA answer	F L3

$\begin{aligned}\text{Deposit} &= \text{R}180\,000,00 \times \frac{15}{100} \\ &= \text{R}27\,000,00 \checkmark \text{MA} \\ \text{Residual} &= \text{R}180\,000,00 \times \frac{25}{100} \\ &= \text{R}45\,000,00 \checkmark \text{CA} \\ \text{Loan amount} &= \text{R}180\,000,00 - (\text{R}27\,000,00 + \text{R}45\,000,00) \\ &= \text{R}108\,000,00 \checkmark \text{MA} \\ \text{Loan plus interest} &= \text{R}108\,000 \times \frac{111}{100} \times \frac{111}{100} \times \frac{111}{100} \checkmark \text{MA} \\ &= \text{R}147\,704,15 \checkmark \text{CA} \\ \text{Total amount} &= \text{R}147\,704,15 + \text{R}27\,000,00 + \text{R}45\,000,00 \checkmark \text{MA} \\ &= \text{R}219\,704,15 \checkmark \text{CA}\end{aligned}$		
		(7)
		[33]

QUESTION 3 [32]			
Ques.	Solution	Explanation	Topic and Level
3.1.1	Eleven million seven hundred and eighty-five thousand and seventy. ✓✓A	2A answer (2)	D L1
3.1.2	$\begin{aligned} &\checkmark\text{MA} \\ \text{Difference} &= 7\,837\,771 - 7\,277\,988 \checkmark\text{RT} \\ &= 109\,783 \\ &= 110\,000 \checkmark\text{R} \end{aligned}$	1RT correct values 1M subtraction 1R rounded number (3)	D L2
3.1.3	$\begin{aligned} \text{Total motorised} &= 7\,837\,771 + 356\,164 + 64\,994 + 350\,405 + 2\,701\,912 \\ &\quad + 393\,725 + 239\,469 \checkmark\text{MA} \\ &= 11\,944\,440 \checkmark\text{CA} \\ \\ &\checkmark\text{RT} \\ \% &= \frac{350\,405}{11\,944\,440} \times 100 \checkmark\text{MA} \\ \\ &= 2,93\% \checkmark\text{CA} \end{aligned}$	1MA adding 2024 total 1CA answer 1RT correct values 1MA multiplying by 100 1CA answer (5)	D L2
3.1.4	0% OR impossible ✓✓A	2A answer (2)	P L2
3.1.5	7 837 771; 2 701 912; 393 725; 356 164; 239 469; 64 994 ✓✓A If learners arrange in ascending order penalise 1 mark	2A arranging in correct order (2)	D L1
3.1.6	$\begin{aligned} &64\,298; 237\,504; 347\,621; 350\,680; 386\,641; 2\,670\,338; \\ &7\,727\,988 \checkmark\text{A} \\ \text{IQR} &= Q3 - Q1 \\ &= 2\,670\,338 \checkmark\text{A} - 237\,504 \checkmark\text{A} \\ &= 2\,432\,834 \\ &\text{Valid} \checkmark\text{O} \end{aligned}$	1A arranging 1A lower quartile 1A upper quartile 1O opinion (4)	D L4
3.2.1	KZN, WC, ✓A NC, LP ✓A One mark per two provinces	2A correct province (2)	D L1
3.2.2	Double bar graph, stacked bar graph, scatter plot ✓✓A	2A correct graph (2)	D L2

3.2.3	$100\% - (5\% + 13\% + 10\% + 7\% + 2\% + 9\% + 12\% + 21\%)$ $100\% - 79\%$ $= 21\% \checkmark \text{CA}$ $\text{Number of learners} = \frac{21}{100} \times 13\,527\,283 \checkmark \text{RT}$ $= 2\,840\,729,43$ $= 2\,840\,729 \checkmark \text{CA (Accept } 2\,840\,730)$	1CA correct percentages 1RT total number of learners 1CA number rounded to the nearest whole number (3)	D L2
3.2.4	$\text{Range} = 21\% - 2\% \checkmark \text{MA}$ $= 19\% \checkmark \text{CA}$	1MA concept of a range 1CA answer (2)	D L2
3.2.5	$\text{Eastern Cape} = 1\,782\,431 \div 61\,673 \checkmark \text{MA}$ $= 28,90$ $= 1 : 29 \checkmark \text{CA}$ $\text{Limpopo} = 1\,819\,118 \div 55\,336$ $= 32,87$ $= 1 : 33 \checkmark \text{CA}$ Eastern Cape is below average. 29 learners per teacher. $\checkmark \text{J}$ Limpopo is above average. 33 learners per teacher. $\checkmark$	1MA dividing correct values 1CA correct ratio (EC) 1CA correct ratio (LP) 2J justification (5)	D L3
		[32]	

QUESTION 4 [34]			
Ques.	Solutions	Explanations	Topic and Level
4.1.1	$\text{Annual gross} = R23\,500 \times 12$ $= R282\,000,00 \checkmark A$ $\text{Tax} = 42\,678 + \frac{26}{100} (282\,000 - 237\,100) \checkmark SF$ $= 42\,678 + 0,26(44\,900)$ $= R42\,678 + R11\,674$ $= R54\,352 - R17\,235 \checkmark MA$ $= R37\,117 \div 12 \checkmark MA$ $= R3\,093,08 \checkmark CA$	1A annual gross 1SF substitution 1MA subtracting rebate 1MA division by 12 1CA monthly tax (5)	F L3
4.1.2	$\checkmark RT$ $\text{Tax} = 42\,678 + \frac{26}{100} (R370\,500 - 237\,100) \checkmark SF$ $= 42\,678 + 0,26 \times 133\,400$ $= 42\,678 + 34\,684$ $= 77\,362 - R17\,235 \checkmark MA$ $= 60\,127 \checkmark CA$ $\text{Monthly tax} = 60\,127 \div 12 \checkmark MA$ $= R5\,010,58 \checkmark CA$ Not valid $\checkmark O$	1RT annual salary 1SF substitution 1MA subtracting rebate 1CA annual tax 1M division by 12 1CA monthly tax 1O opinion (7)	F L4
4.2.1	Recording sheet $\checkmark \checkmark A$	2A correct instrument (2)	D L1
4.2.2	$18 \checkmark SF = \frac{17 + 19 + 20 + 18 + A + 17 + 19 + 18}{8} \checkmark MA$ $18 = \frac{128 + A}{8} \checkmark S$ $18 \times 8 = 128 + A \checkmark MA$ $A = 144 - 128 \checkmark MA$ $A = 16 \checkmark CA$	1SF correct substitution 1MA addition 1S simplification 1MA multiplying by 8 1MA subtraction 1CA answer (6)	D L4
4.2.3	Outlier $\checkmark \checkmark A$	2A answer (2)	D L2
4.3.1	2 670 000 000 $\checkmark \checkmark A$	2A correct number (2)	D L2

4.3.2	Prioritise ECD Basic Education ✓ because it has the least allocation. ✓✓O (Accept any reasonable answer)	1A category 2O correct opinion (3)	D L4
4.3.3	Budget is a plan on how money is going to be spent on education. ✓✓A OR Financial plan on how to spend money on education. ✓✓A OR Estimated income and expenditure of money to be used in education. ✓✓A	2A definition (2)	F L2
4.3.4	School infrastructure ✓✓A	2A correct answer (2)	F L2
4.3.5	$P = \frac{1}{4}$ ✓A 4 ✓A = 0,25 ✓CA	1A numerator 1A denominator 1CA simplification (3)	P L2
		[34]	

QUESTION 5 [23]			
Ques.	Solutions	Explanations	Topic and Level
5.1.1	C ✓✓A	2A correct answer (2)	F L1
5.1.2	A ✓✓A	2A correct answer (2)	F L1
5.2.1	81 ✓✓A	2A mode (2)	D L2
5.2.2	Median $= \frac{75+79}{2}$ ✓MA Median $= \frac{154}{2}$ ✓MA Median = 77 ✓A	1MA median method 1MA adding and dividing by 2 1A correct median (3)	D L2
5.3.1	UIF = R18 000 x $\frac{1}{100}$ ✓MA = R180,00 ✓CA Noxie is correct. ✓J	1MA multiplying by $\frac{1}{100}$ 1CA simplification 1J justification (3)	F L2
5.3.2	The mistake that was made was adding housing subsidy and cellphone allowance to the basic salary before calculating UIF. ✓✓A (Accept any reasonable answer)	2A explanation (2)	F L4
5.4	Sewage used = 40 kℓ x $\frac{75}{100}$ = 30 kℓ ✓A NOVA: SEWAGE 6 kℓ x R30,89 = R185,34 ✓ MA 9 kℓ x R24,71 = R222,39 15 x R10,50 = <u>R157,50</u> = R565,23 x 1,15 ✓MA = 650,01 ✓CA WATER: 40 – 30 = 10 kℓ 6 kℓ x R26,12 = R156,72 4 kℓ x 43,00 = <u>R172,00</u> = R328,72 x 1,15 = R378,03 ✓CA Total = R650,01 + R378,03 = R1 028,04 ✓CA PAUL: ELECTRICITY 300 kWh x R2,5861 = R775,83 ✓CA Total = R775,83 + (R35 x 4) = R915,83 ✓CA Nova will pay more (R112,21) ✓O	1A sewage used 1MA correct kℓ 1 MA multiply by 1,15 1CA answer 1CA answer 1CA answer 1CA answer 1O opinion (9)	F L4
		[23]	

TOTAL MARKS: 150