KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

MATHEMATICAL LITERACY P1

PREPARATORY EXAMINATION

SEPTEMBER 2025

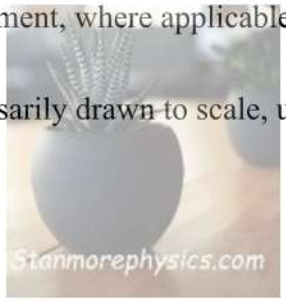
MARKS: 150

TIME: 3 hours

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

INSTRUCTIONS AND INFORMATION

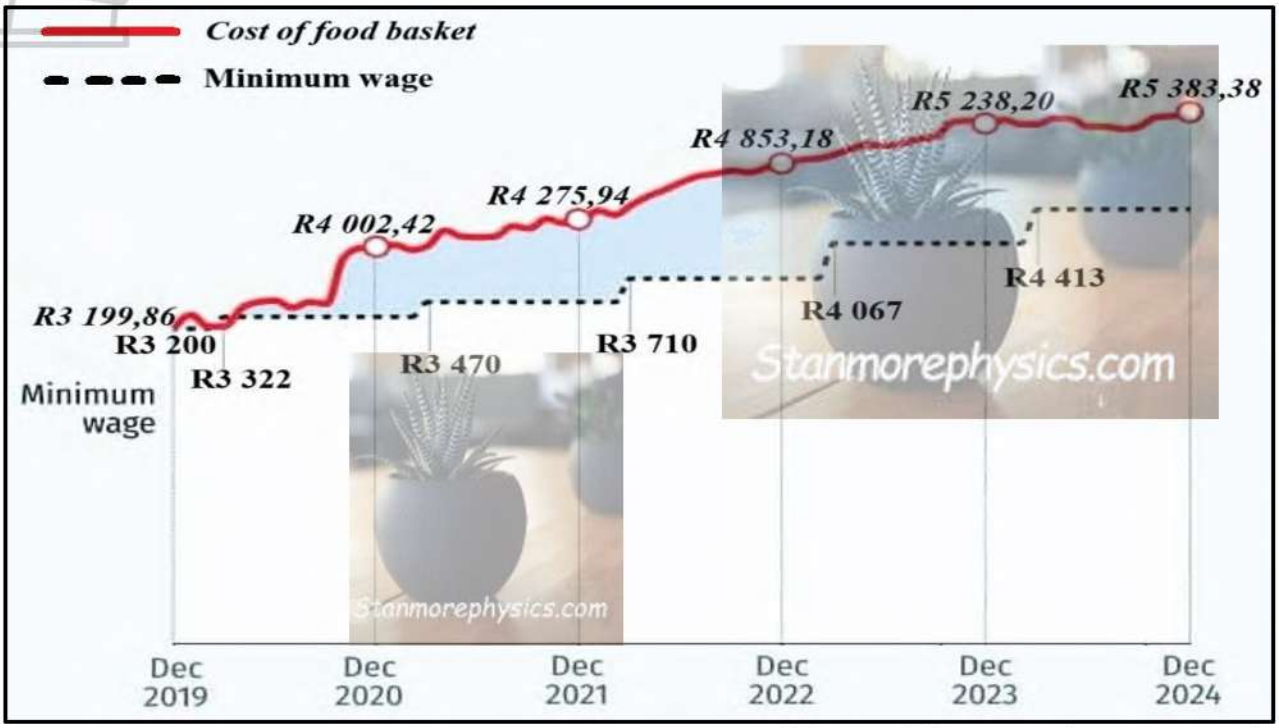
1. This question paper consists of FIVE questions. Answer ALL the questions.
2. Answer ALL the questions in the SPECIAL ANSWER BOOK provided.
3. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
4. Show ALL calculations clearly.
5. Round off ALL final answers 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 The graph above shows the cost of a basic food basket and the minimum wage from December 2019 to December 2024.

THE COST OF A BASIC FOOD BASKET AND THE MINIMUM WAGE



[Extracted from www.instagram.com]

Use the graph and information above to answer the questions that follow.

1.1.1 Write down the cost of the food basket in December 2019 in words. (2)

1.1.2 Identify the minimum wage in December 2021. (2)

1.1.3 Round off the cost of a food basket in December 2022 to the nearest hundred rands. (2)

1.1.4 Determine the difference between the cost of the food basket and the minimum wage in December 2024. (2)

1.1.5 Name the type of graph used to represent the minimum wage. (2)

1.1.6 The probability that a randomly selected minimum wage is less than the cost of the food basket in December 2021 is $\frac{5}{6}$.

Express this probability as a percentage. (2)

1.2 TABLE 1 below shows an MTN contract offer.

TABLE 1: MTN CONTRACT OFFER

	Description	Cost per Month	Contract Period
Device	Samsung Galaxy S25 Ultra (256 GB)	R660	36 months
Plan	Yellow Delux: 6 GB anytime data 250 all-net minutes (FREE)	R439	36 months

[**Adapted from www.mtn.co.za**]

NOTE: 1 gigabyte (GB) = **1 000 megabytes**

Use TABLE 1 and the information above to answer the questions that follow.

1.2.1 Convert the contract period to years. (2)

1.2.2 Determine the total amount the customer will pay for the 36-month contract. (3)

1.2.3 Calculate the total data the customer will receive in 36 months, expressed in megabytes. (3)

1.2.4 State ONE financial advantage of choosing this contract option instead of buying the phone cash and using prepaid services. (2)

1.3 TABLE 2 below shows the number of learners and schools requiring transport in the nine provinces, as well as those that received transport in 2023/2024.

TABLE 2: NATIONAL LAND TRANSPORT PROGRAMME PERFORMANCE 2023/2024

NLTP PERFORMANCE 2023/2024								
PROVINCE	**NEEDS**		**TARGET**			**ACTUAL FIGURES**		
	No. of Learners in Need	No. of Schools in Need	No. of Learners Targeted	No. of Schools Targeted	% of Learners Targeted	No. of Learners Transported	No. of Schools	% Learners Against the Need
Eastern Cape	131 272	1 127	103 000	1 044	75%	124 421	1 004	91%
Free State	8 431	147	8 431	147	100%	9 958	147	118%
Gauteng	217 664	690	200 750	644	92%	206 219	649	95%
KwaZulu Natal	237 066	1 571	62 000	423	26%	74 359	433	31%
Limpopo	72 480	568	64 907	538	90%	67 382	538	93%
Mpumalanga	73 722	353	72 809	336	99%	72 809	336	99%
North West	63 708	418	58 979	340	93%	57 907	343	91%
Northern Cape	26 783	278	26 286	269	98%	26 776	272	100%
Western Cape	63 820	483	63 820	483	100%	67 222	495	105%
TOTAL	**900 946**	**5 635**	**660 982**	**4 224**	**73%**	**707 053**	**4 217**	**78%**

[Adapted from www.citizen.co.za]

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

1.3.1 State whether the data in the table above is discrete or continuous. (2)

1.3.2 Name the province with an outlier in the number of schools targeted for transport. (2)

1.3.3 Identify how many schools in Gauteng are in need of transport assistance. (2)

1.3.4 Express the total number of learners transported in 2023/2024 in millions. (2)

[30]

QUESTION 2

2.1 Mr S Sampson receives his monthly bank statement. An extract from this statement is provided in ANNEXURE A in the ANSWER BOOK.

NOTE: Branch Cash Withdrawal: Transaction fee = R90 + R4 per R100 or part thereof

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

2.1.1 Explain the term *debit order* according to the context. (2)

2.1.2 State ONE reason why many individuals prefer to receive their bank statements via email. (2)

2.1.3 Determine the value of **A**, which has been omitted from the bank statement. (2)

2.1.4 Calculate the total amount of all the debit transactions. (3)

2.1.5 Calculate the percentage that the total debit transactions represent of the final balance amount of R55 748,07. (3)

2.1.6 Determine the probability, expressed as a simplified fraction, that a randomly selected transaction is greater than R1 000. (3)

2.1.7 Calculate the transaction fee for Mr. Sampson's withdrawal of R10 600 made inside the branch. (4)

2.1.8 Suggest ONE strategy that Mr Sampson can implement to reduce his monthly spending. (2)

2.2 Mr. Sampson has a daughter who will enter Grade 8 in 2026. He has applied for her admission to a public school, and the breakdown of the school fees is as follows:

- Annual fees: R19 000
- Once off non-refundable admin fee: R150 (to accompany the application form)
- School Entrance Levy: R750 (to be paid when confirming acceptance)
- School Fee Deposit: R5 850 (to be paid when confirming acceptance)
- Stationery Fee: R900 (to be paid when confirming acceptance)
- 10% discount on annual school fees if all fees are paid by end of March

[Adapted from Public School Info Website]

Use the information above to answer the questions that follow.

2.2.1 Calculate the total amount required to confirm acceptance. (3)

2.2.2 Determine the outstanding school fees balance after the deposit is paid to confirm acceptance. (2)

2.2.3 Mr. Sampson has organised extra Mathematics lessons for his daughter at R800 per month from January to October.

If he plans to pay the full annual school fees by the end of March, calculate the total amount he will spend on her education in 2026. (6)

[32]

QUESTION 3

3.1 Stock theft remains a major concern in rural areas of South Africa. ANNEXURE B in the ANSWER BOOK shows the types of livestock stolen from January 2025 to March 2025.

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

3.1.1 Identify the most frequently stolen type of livestock. (2)

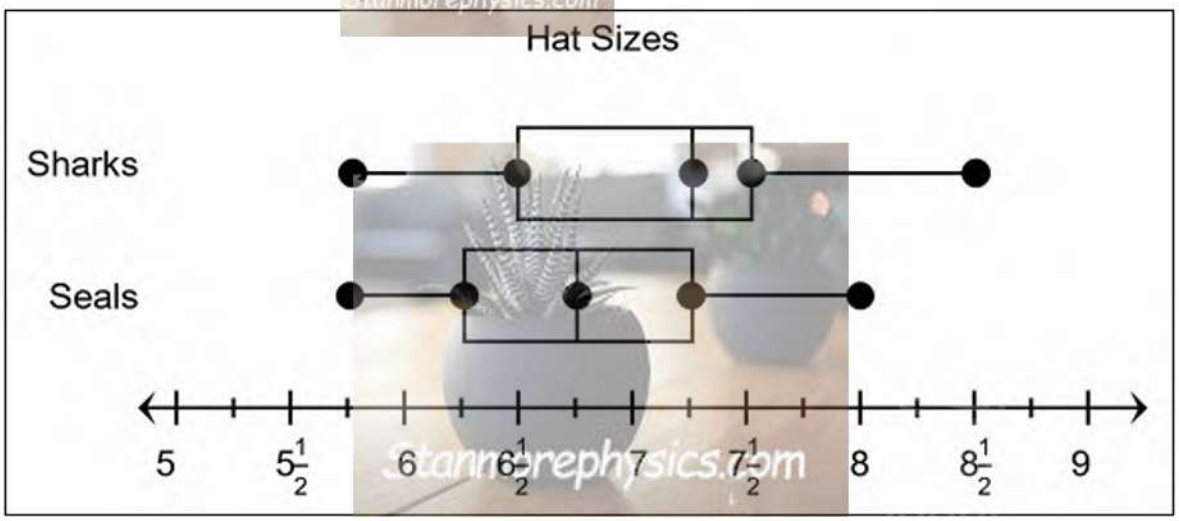
3.1.2 Calculate the range of livestock stolen from January to March 2025. (2)

3.1.3 The mean number of livestock stolen is 5 245. A provincial police commissioner claimed that the missing value **B** (representing the number of goats stolen) is exactly 12 027.

Use calculations to verify the commissioner's claim. (5)

3.1.4 Determine poultry thefts as a percentage of the total livestock thefts, rounded to TWO decimal places. (3)

3.2 A student from a Sports Academy collected data on the hat sizes of two baseball teams, the Sharks and the Seals. This data is shown in the graph below.



[**Adapted from www.consenzaassociates.com**]

Use the graph and the information above to answer the questions that follow.

3.2.1 Define a *box-and-whisker* plot. (2)

3.2.2 Calculate the interquartile range (IQR) for the Sharks team. (4)

3.2.3 Compare the hat sizes between the two teams. (5)

3.2.4 Give ONE reason for using the interquartile range (IQR) instead of the range to describe data. (2)

[25]

QUESTION 4

4.1 A local rugby team is planning a tour to four countries: the United States, the United Kingdom, Australia, and Ireland. Below is a summary of the exchange rates for these countries.

TABLE 3: NEDBANK EXCHANGE RATES

Country	Bank Buy	Bank Sell
US Dollar ($)	0,0571	0,0541
British Pound (£)	0,0425	0,0400
Euro (€)	0,0507	0,0475
Australian Dollar (AUSD)	11,0619	12,2100

[**Adapted from www.nedbank.co.za**]

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

4.1.1 Identify the country in the table where the exchange rate is given as rand per unit of foreign currency. (2)

4.1.2 Using the Bank Buy rate, calculate the value of £1 in rands.
Express your answer in the form:

£1 = R …. (3)

4.1.3 A rugby player plans to exchange R25 000 for euros. Identify the exchange rate the bank will apply and calculate the amount of euros he will receive. (4)

4.1.4 At the end of the tour, a rugby player has 27 AUD and 105 USD to convert to rands. Calculate the total amount he will receive in rands. (6)

4.2 Khethelo, a rugby player, downloaded the Hoghton temperature graph for the United Kingdom, which is shown in ANNEXURE C in the ANSWER BOOK.

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

4.2.1 Write down the stage of the statistical cycle displayed in ANNEXURE C. (2)

4.2.2 Determine the median of the High temperatures. (4)

4.2.3 A month is selected at random. Calculate the probability that its Low temperature is below 7.3 °C. Express your answer as a percentage. (3)

4.2.4 Khethelo stated that the difference between the interquartile range (IQR) of the Low Temperatures and the range of the High Temperatures is 6,3°C, rounded to one decimal place.

Show, by means of calculations, whether Khethelo's statement is CORRECT.

NOTE: Q_1 and Q_3 for Low Temperatures are 2,35 °C and 8,9 °C respectively. (8)

[32]

QUESTION 5

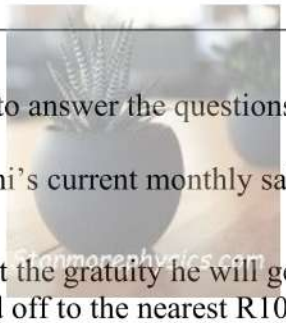
5.1 Mbongeni, a pharmacist at a local hospital with 30 years of service and an annual salary of R584 300, wants to find out his monthly annuity if he retires at the end of 2025.

The Government Employees Pension Fund (GEPF) applies the following formulae:

- Gratuity = 6.72% x annual salary x years of pensionable service
- Annual annuity = (1/55 x annual salary x years of pensionable service) + R360

Gratuity is lump-sum payment received upon retirement.
Annual annuity is the annual payment received from a person's retirement savings from which monthly payments are determined.
Income replacement ratio (IRR) shows the percentage of pre-retirement income replaced by retirement benefits.

[**Adapted from www.mayaonmoney.co.za**]



Use the information above to answer the questions that follow.

5.1.1 Determine Mbongeni's current monthly salary. (2)

5.1.2 Mbongeni states that the gratuity he will get when he retires is approximately R1 200 000 rounded off to the nearest R100 000.

Verify, showing ALL calculations, whether his statement is CORRECT. (4)

5.1.3 Use the annual salary to calculate Mbongeni's monthly annuity. (4)

5.1.4 Hence, calculate Mbongeni's income replacement ratio.

You may use the formula:

$$\textbf{INCOME REPLACEMENT RATIO (IRR)} = \frac{\textbf{Monthly Annuity}}{\textbf{Monthly Income at Retirement}} \times \textbf{100 \%}$$

(2)

5.2 The Sithole family, residing in Johannesburg, purchases prepaid electricity from the Johannesburg City Municipality. Below are the tariff rates for the 2024/2025 period.

TABLE 4: JOHANNESBURG CITY PREPAID TARIFF RATES 2024/2025

BLOCK	SIZE	TARIFF (c/kWh) (15 % VAT Excl.)
1	0 – 350 kWh	221,62
2	> 350 – 500 kWh	271,10
3	> 500 kWh	322,61

[Adapted from www.joburg.org.za]

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

5.2.1 Mr Sithole purchased prepaid electricity for R1 200 (including VAT) to prepare for his daughter's 21st birthday celebration. Calculate the VAT amount. (4)

5.2.2 Calculate the number of electricity units purchased with R1 200 using the tariff rate excluding VAT. (6)

5.3 Mr Sithole invested R0,5 million for 3 years in a bank that offers an interest rate of 6,5% per annum, compounded quarterly. He claims that he will earn R24 773,24 in interest after the third quarter.

Verify with calculations whether his claim is correct. (9)

[31]

TOTAL MARKS: 150

KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

NSC Answer Book / NSS Antwoordboek

National Senior Certificate (Grade 12) / Nasionale Seniorsertifikaat (Graad 12)

SURNAME / VAN	
FIRST NAMES / VOORNAME	
DATE / DATUM	
GRADE /GRAAD	
SUBJECT / VAK	MATHEMATICAL LITERACY / WISKUNDIGE GELETTERDHEID

BOOK NUMBER/ BOEK NOMMER		OF/ VAN		BOOKS/ BOEKE

PAPER NUMBER/ VRAESTEL NOMMER	1

MARKER / NASIENER				MODERATOR'S INITIALS IN RELEVANT BLOCK/ MODERATOR SE VOORLETTERS IN RELEVANTE BLOKKIE													
Question/Vraag	Marks/ Punte			Marker's Initials/ Nasiener se voorletters	Marks / Punte			DH	Marks / Punte			CM	Marks / Punte			DM	Marks/ Punte			PM	Marks/ Punte			EM
1																								
2																								
3																								
4																								
5																								
				TOTAL / TOTAAL																				

READ INSTRUCTIONS ON THE NEXT PAGE./
LEES INSTRUKSIES OP DIE VOLGENDE BLADSY.

This answer book consists of 14 pages / Hierdie antwoordboek bestaan uit 14 bladsye

FOLLOW THESE INSTRUCTIONS CAREFULLY /
VOLG HIERDIE INSTRUKSIES DEEGLIK

1. Clearly write your surname and names in the space provided/
Skryf jou van en name duidelik in die gegewe spasies.

2. Answer ALL questions in the spaces provided/
Beantwoord ALLE vrae in die gegewe spasies.

3. No pages may be torn from this answer book /
Geen bladsye mag uit hierdie antwoordboek geskeur word nie.

4. Read the instructions in the examination paper carefully /
Lees die instruksies in die vraestel deeglik deur.

5. Candidates may not retain an answer book or remove it from the examination room. /
Kandidate mag nie 'n antwoordboek hou of uit die eksamenlokaal verwyder nie.

6. Answers must be written in black/blue ink as distinctly as possible /
Antwoorde moet so duidelik as moontlik in swart/blou ink geskryf word.

7. Do not write in the margins. / Moenie in die kantlyne skryf nie.

8. If you require additional space for your answers: /
As jy ekstra spasie nodig het vir jou antwoorde:

   8.1 Use the additional space provided at the end of the answer book /
   Gebruik die ekstra spasie wat aan die einde van die antwoordboek voorsien is.

   8.2 When answering a question in the additional space, indicate clearly the question number in the column on the left-hand side / Wanneer jy 'n vraag in die ekstra spasie beantwoord, dui die vraagnommer duidelik in die kolom aan die linkerkant aan.

9. Draw a neat line through any work that must not be marked /
Trek 'n netjiese streep deur enige werk wat nie gemerk moet word nie.

QUESTION/VRAAG 1

1.1	**Solution / Oplossing**	**Marks/ Punte**
1.1.1		(2)
1.1.2		(2)
1.1.3		(2)
1.1.4		(2)
1.1.5		(2)
1.1.6		(2)
1.2.1		(2)
1.2.2		(3)
1.2.3		(3)
1.2.4		(2)
1.3.1		(2)
1.3.2		(2)
1.3.3		(2)
1.3.4		(2)
		[30]

QUESTION/VRAAG 2.1

ANNEXURE/BYLAAG A

Statement from 15 January 2025 to 15 February 2025/ Bankstaat vanaf 15 Januarie 2025 tot 15 Februarie 2025

BANK STATEMENT/TAX INVOICE / BANKSTAAT/BELASTINGFAKTUUR

PRESTIGE CURRENT ACCOUNT / LOPENDE REKENING

Details/Besonderhede	Service Fee/ Diensfooi	Debits/ Debiete	Credits/ Krediete	Date/ Datum	Balance/ Balans
Balance brought forward/Balans oorgedra					65,532.72
Lottery purchase/Lotery aankoop		7.50-		01 23	65,525.22
VAS00102070381 LOTTO Fee lottery purchase/Fooi Lotery aankoop	##	2.95-		01 23	65,522.27
IB Payment to Sibongiseni/Paaiement aan Sibongiseni		10,600-		01 23	54,922.27
Cheque card purchase/Tjekkaart aankoop C*Ackermans E 5326*4903 21 Jan		880.35-		01 23	54,041.92
Cheque card purchase/Tjekkaart aankoop C*Superspar e 5326*4903 20 Jan		87.01-		01 23	53,954.91
Magtape Credit/Magband Krediet JWS			21,455.98	01 23	A
Debicheck debit order/Debietorder Indreamrewc8771934 250124		135.00-		01 24	75,275.89
Cheque card purchase/Tjekkaart aankoop C*JWS 5326*4903 22 Jan cheque		995.00-		01 24	74,280.89
Card purchase/Kaart Aankoop C*John Wesley 5326*4903		1,250.00-		01 24	73,030.89
22 Jan IB Payment to/Betaling aan NNxumalo		400.00-		01 24	72,630.89
IB Payment to Intuitive PDA LT Debt Care / Betaling aan Intuitive PDA LT Debt Care		13,000.00-		01 24	59,630.89
Lottery purchase/Lotery aankoop VAS00102334747 Powerball		7.50-		01 24	59,623.39
Fee Lottery Purchase Immediate payment/ Fooi Lotery Aankoop onmiddellike betaling	##	2.95-		01 24	59,620.44
223612048 Easton-Berry Trust		2,209.87-		01 24	57,410.57
Fee Immediate Payment/Fooi Onmiddellike Paaiement	##	50.00-		01 24	57,360.57
223627976 Capital Data		673.66-		01 25	56,686.91
Fee Immediate Payment cheque card payment/ Fooi Onmiddellike Paaiement op tjekkaart betaling	##	7.00-		01 25	56,679.91
C*PNP FAM ESH 5326*4903 23 Jan		133.15-		01 25	56,546.76
Cheque Card Purchase/Tjekkaart aankoop C*Clicks Esho 5326*4903 23 Jan		433.60-		01 25	56,113.16
Cheque Card Purchase/Tjekkaart aankoop C*Superspar E 5326*4903 22 Jan		365.09-		01 25	55,748.07

[Adapted from Sampson's account statement/Aangepas uit Sampson se rekeningstaat]

QUESTION/VRAAG 2

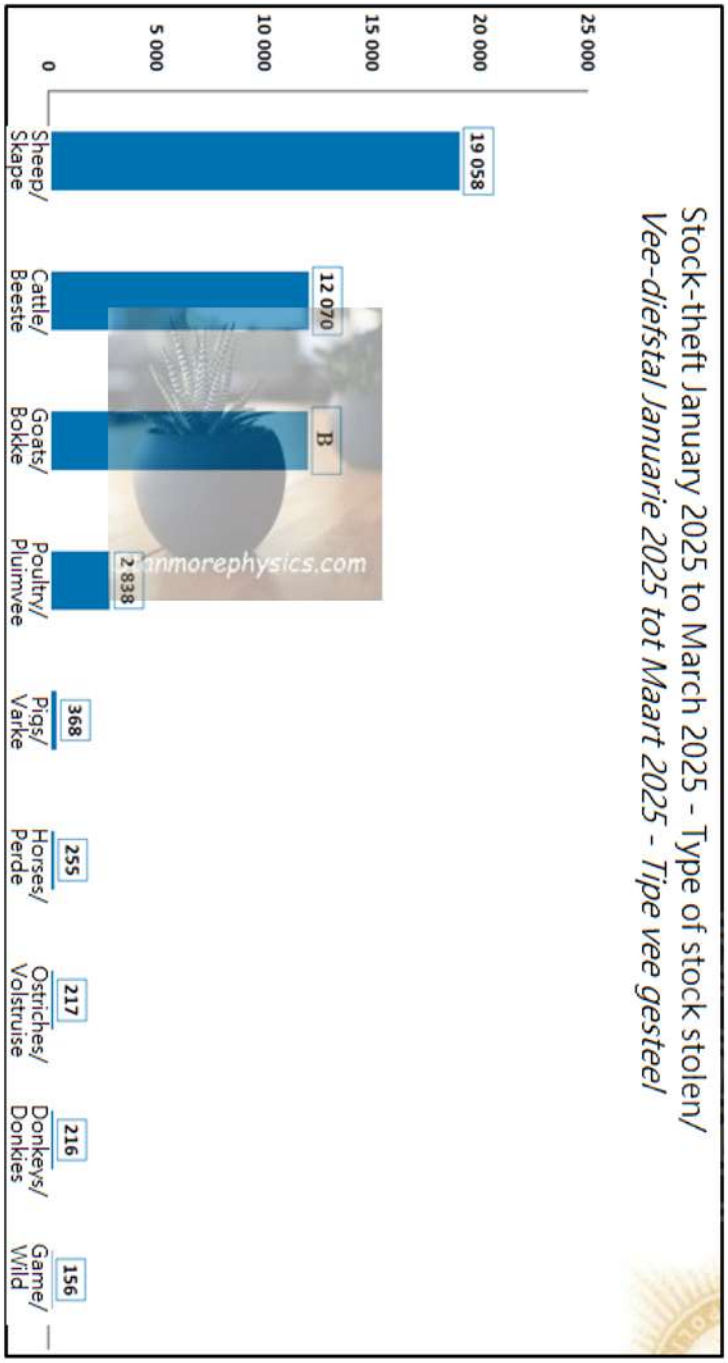
	Solution / Oplossing	Marks/ Punte
2.1.1		(2)
2.1.2		(2)
2.1.3		(2)
2.1.4		(3)
2.1.5		(3)
2.1.6		(3)
2.1.7		(4)
2.1.8		(2)

2.2.1		(3)
2.2.2		(2)
2.2.3		(6)
		[32]

QUESTION/VRAAG 3.1

ANNEXURE/BYLAAG B

LIVESTOCK THEFT FROM JANUARY 2025 TO MARCH 2025/
VEE-DIEFSTAL VANAF JANUARIE 2025 TOT MAART 2025



[Adapted from / Aangepas uit www.saps.gov.za]

QUESTION/VRAAG 3

	Solution / Oplossing	Marks/ Punte
3.1.1		(2)
3.1.2		(2)
3.1.3		(5)
3.1.4		(3)
3.2.1		(2)
3.2.2		(4)
3.2.3		(5)
3.2.4		(2)
		[25]

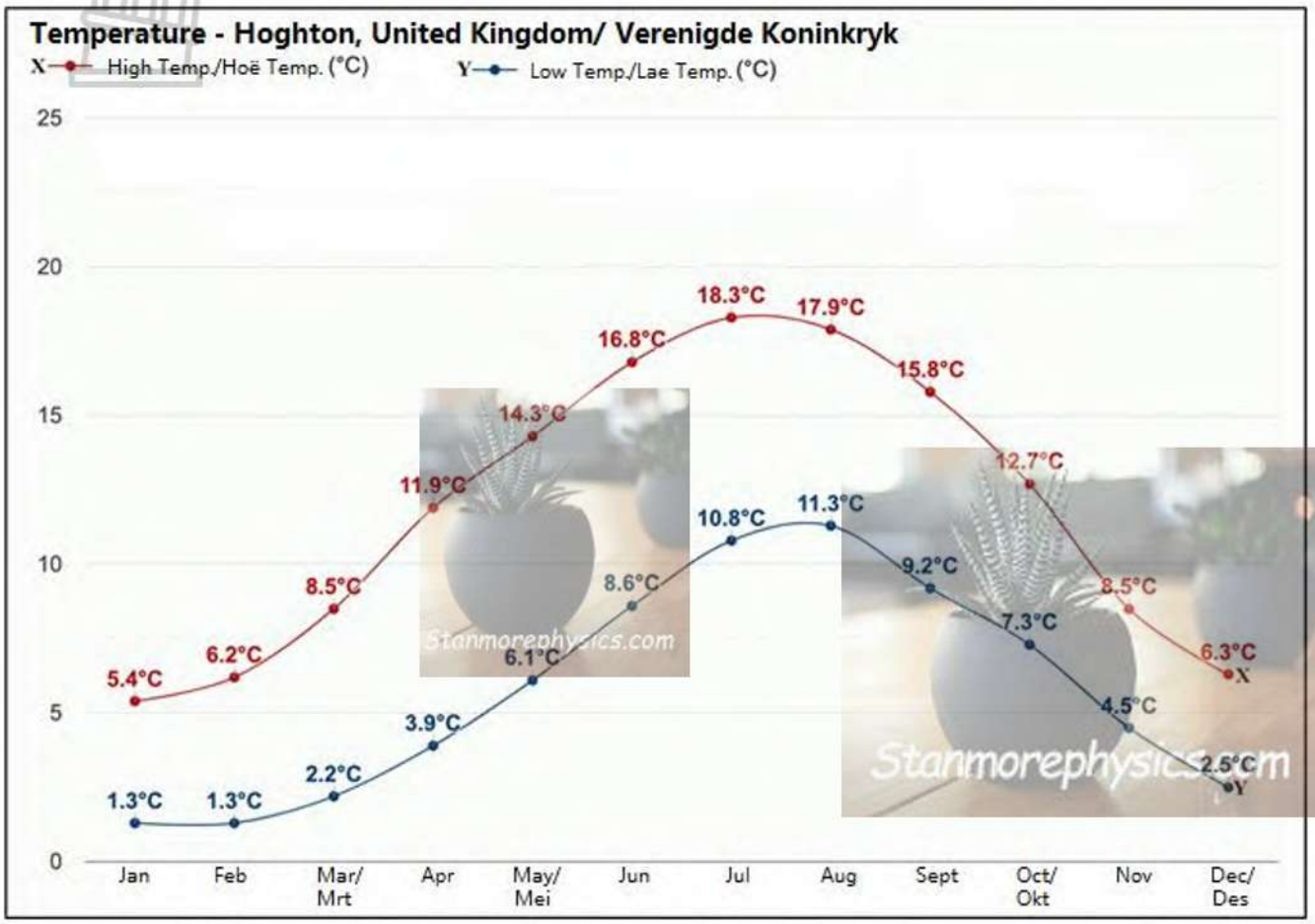
QUESTION/VRAAG 4

	Solution / Oplossing	Marks/ Punte
4.1.1		(2)
4.1.2		(3)
4.1.3		(4)
4.1.4		(6)

QUESTION/VRAAG 4.2

ANNEXURE/BYLAAG C

TEMPERATURE – HOGHTON, UNITED KINGDOM/VERENIGDE KONINKRYK



[Adapted from/ Aangepas uit www.weather-atlas.com]

	Solution / Oplossing	Marks/ Punte
4.2.1		(2)
4.2.2		(4)
4.2.3		(3)
4.2.4		(8)
		[32]

QUESTION/VRAAG 5.1

	Solution / Oplossing	Marks/ Punte
5.1.1		(2)
5.1.2		(4)
5.1.3		(4)
5.1.4		(2)
5.2.1		(4)

5.2.2		(6)
5.3		(9)
		[31]

	Additional space / Ekstra spasie	Marks/ Punte

TOTAL MARKS/ TOTALE PUNTE: 150

KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

MATHEMATICAL LITERACY P1

MARKING GUIDELINES

PREPARATORY EXAMINATION

SEPTEMBER 2025

MARKS: 150

SYMBOL	EXPLANATION
MA	Method with accuracy
MCA	Method with consistent accuracy
CA	Consistent Accuracy
A	Accuracy (Answer)
C	Conversion
S	Simplification
RT	Reading from a table/ graph/ diagram/map
SF	Correct substitution in a formula
O	Opinion/ reason/deduction/example/Explanation
R	Rounding off
F	deriving a formula
AO	Answer only
P	Penalty e.g. for units, incorrect rounding off etc.
NPR	No penalty for correct rounding
NPU	No penalty for omitting unit, but wrong unit is penalised
RCA	Rounding with consistent accuracy

This marking guideline consists of 8 pages.

NOTES:

- 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 item presented.

QUESTION 1 [30 MARKS] ANSWER ONLY FULL MARKS

Ques	Solution	Explanation	T & L
1.1.1	Three thousand one hundred and ninety-nine rand eighty-six cents.✓✓RT	2RT reading from graph (2)	DH L1 E
1.1.2	R3 470✓✓RT	2RT correct amount (2)	DH L1 E
1.1.3	R4 900✓✓R	2R Rounding off (2)	DH L1 E
1.1.4	Difference = R5 383,38 – R4 413✓MA = R970,38✓A	1MA subtracting 1A correct answer (2)	DH L1 E
1.1.5	Step graph✓✓A	2A correct answer (2)	DH L1 E
1.1.6	Probability (minimum wage) = $\frac{5}{6}$ × 100%✓MA = 83,33%✓A	1MA % concept 1A correct answer **NPR** (2)	P L1 E
1.2.1	Contract period (years) = 36 ÷12✓MA = 3 ✓A	1MA dividing by 12 1A correct answer (2)	F L1 E
1.2.2	Total Amount = R660 + R439✓MA = R1 099 × 36✓MA = R39 564✓A	1MA adding values 1MA multiplying by 36 1A correct answer (3)	F L1 E
1.2.3	✓MA Data in megabyte = (6 × 36) × 1000✓MA = 216 000✓A	1MA multiplying by 36 1MA multiplying by 1000 1A correct answer (3)	F L1 E
1.2.4	Cost is spread over many months; it becomes affordable in the short term ✓✓O **OR** Avoid buying prepaid airtime/data which helps with managing cash flow and budgeting ✓✓O	2O correct explanation (2)	F L1 D
1.3.1	discrete✓✓A	2A correct answer (2)	DH L1 E

1.3.2	Eastern Cape ✓✓A	2A correct answer (2)	DH L1 E
1.3.3	690 schools ✓✓A	2A correct answer (2)	DH L1 E
1.3.4	= 707 053 ÷ 1 000 000 ✓MA = 0,707 million ✓A	1MA dividing by 1 000 000 1A correct answer (2)	DH L1 E
		[30]	

QUESTION 2 [32 MARKS]			
2.1.1	Debit order is an agreement that allows a service provider to take money from Mr. Sampson's bank account on a set date to pay for good/services.✓✓O	2O Correct Explanation (2)	F L1 E
2.1.2	Convenience – Statements are delivered instantly and can be accessed anytime without visiting the bank. ✓✓O **OR** Cost-saving – No printing or postage fees compared to paper statements. ✓✓O **OR** Eco-friendly – Reduces the use of paper, helping the environment. ✓✓O **OR** Faster notifications – Customers can monitor transactions more regularly and detect any errors or fraud early✓✓O **OR** Easier to share/store for online applications✓✓O	2O Correct Explanation (2)	F L4 E
2.1.3	A = R53 954,91 + R21 455,98✓MA = R75 410,89✓A **OR** A = R75275,89 – (–R135)✓MA = R75 410,89✓A	1MA adding values 1A correct answer **OR** 1MA subtracting values 1A correct answer (2)	F L2 E
2.1.4	Sum of debits = R7,50 + R2,95 + R10 600 + R880,35 + R87,01 + R135 + R995 + R1 250 + R400 + R13 000 + R7,50 + R2,95 + R2 209,87 + R50 + R673,66 + R7 + R133,15 + R433,60 + R365,09✓MA = R31 240,63✓CA	1MA adding correct values 1CA answer (2)	F L2 E
2.1.5	Percentage = $\frac{\text{R31 240,63}}{\text{R55 748,07}}$ ✓MCA × 100% ✓MA = 56,04✓CA	**CA from 2.1.4** 1MCA dividing by total 1MA percentage concept 1CA answer (3)	F L2 M
2.1.6	P(Transaction > R1 000) = $\frac{5✓A}{20✓A}$ = $\frac{1}{4}$✓S	1A Numerator 1A Denominator 1S simplifying (3)	P L2 M

2.1.7	Number of R100 = R10 600 ÷ R100✓MA = 106✓A Transaction fee = R90 + (106 × R4)✓MCA = R514✓CA	1MA dividing by R100 1A simplifying 1MCA for adding and multiplying 1CA answer (4)	F L3 M
2.1.8	Reduce the lottery ticket purchases✓✓O **OR** Reduce the amount spent on non-essential items like clothing✓✓O	2O Correct Explanation (2)	F L4 E
2.2.1	✓MA ✓MA Amount to be paid = R150 + R750 + R5 850 + R900 = R7 650 ✓CA	1MA adding R150 1MA adding 3 correct values 1CA answer **Accept R7500** (3)	F L2 E
2.2.2	Outstanding amount = R19 000 – R5 850✓MA = R13 150✓A	1MA subtracting R5 850 1A correct answer (2)	F L2 E
2.2.3	Extra Maths lessons = 10 × R800✓MA = R8 000✓A ✓MCA ✓MA Discounted school fees = R13 150 – (R19 000 × 10%) = R11 250✓CA Total to be paid = R8 000 + R150 + R7 500 + R11 250 = R26 900✓CA	**CA from 2.2.1 & 2.2.2** 1MA multiplying by 10 1A correct answer 1MCA for subtracting 1MA multiplying R19 000 by 10% 1CA answer 1CA answer (6)	F L3 M
		[32]	

QUESTION 3 [25 MARKS]			
3.1.1	Sheep ✓✓RT	2RT reading from graph (2)	DH L1 E
3.1.2	✓RT Range = 19 058 – 156 = 18 902✓A	1RT for both correct values 1A correct answer (2)	DH L2 E
3.1.3	✓A 19 058 + 12 070 + 2 838 + 368 + 255 + 217 + 216 + 156 = 35 178 ✓MA $\frac{B + 35\,178}{9} = 5\,245$ ✓MA B = (9 × 5 245) – 35 178 ✓MA = 12 027 The Commissioner's statement is VALID.✓O	1A correct answer 1MA concept of mean 1MA multiplying by 9 1MA subtracting 35 178 1O opinion (5)	DH L4 D
3.1.4	% Of Poultry theft = $\frac{2838✓A}{47\,205✓A} \times 100$ = 6,01✓R	1A Numerator 1A denominator 1R Rounding off (3)	DH L2 E
3.2.1	It is a graph that is used to show the distribution of a data set displaying the five number summary. ✓✓A **OR** Visual representation of the five number summary of a data set. ✓✓A	2A correct definition	DH L1 E
3.2.2	$Q_1 = 6\frac{1}{2}$ ✓RT $Q_3 = 7\frac{1}{2}$ ✓RT IQR = $7\frac{1}{2} - 6\frac{1}{2}$ ✓MCA = 1✓CA	1RT for 6,5 1RT for 7,5 1MCA subtracting 1CA answer (4)	DH L3 M
3.2.3	<table><tr><th></th><th>SHARKS</th><th>SEALS</th></tr><tr><td>Q1</td><td>6½</td><td>6¼</td></tr><tr><td>Q2</td><td>7¼</td><td>6¾</td></tr><tr><td>Q3</td><td>7½</td><td>7¼</td></tr><tr><td>Max</td><td>8½</td><td>8</td></tr></table> ✓RT ✓RT ✓RT ✓RT Sharks hat sizes are bigger than Seals hat sizes ✓O	1RT for both Q1 values 1RT for both Q2 values 1RT for both Q3 values 1RT for both max values 1O conclusion (5)	DH L4 D
3.2.4	IQR is not affected by extreme values (Outliers), whereas the range can be greatly influenced by outliers. ✓✓O	2O Correct Explanation (2)	D L4 E
		[25]	

QUESTION 4 [32 MARKS]			
4.1.1	Australia✓✓A	2A Correct answer (2)	F L1 E
4.1.2	R1 = £0,0425✓RT £1 = R1 ÷ 0,0425✓MA = R23,53✓A	1RT reading from table 1MA dividing by 0,0425 1A correct answer (3)	F L2 E
4.1.3	R1 = €0,0475✓RT ✓A Euros = 25 000 × 0,0475✓MCA = 1 187,50 ✓CA	1RT for 0,0475 1A for R25 000 1MCA for multiplying 1CA answer (4)	F L3 M
4.1.4	27AUD = 27 × R11,0619 ✓MA = R298,67 ✓A 105USD = 105 ÷ 0,0571 ✓MA = R1 838,88 ✓A Total = R298,67 + R1 838,88✓MCA = R2 137,55✓CA	1MA multiplying by R11,0619 1A correct answer 1MA dividing by 0,0571 1A correct answer 1MCA adding values 1CA answer (6)	F L3 M
4.2.1	Representing/Displaying Data✓✓A	2A answer (2)	DH L1 E
4.2.2	✓A 5,4; 6,2; 6,3; 8,5; 8,5; 11,9; 12,7; 14,3; 15,8; 16,8; 17,9; 18,3 ✓MA Median = (11,9 + 12,7) ÷ 2✓MA = 12,3 °C✓A	1A for arranging the data 1MA for adding 11,9 and 12,7 1MA for dividing by 2 1A correct answer (4)	DH L2 M
4.2.3	P(min. temp. < 7,3 °C) = $\frac{7✓A}{12✓A} \times 100\%$ = 58,33% ✓A	1A for Numerator 1A for Denominator 1A correct answer **NPR** (3)	P L2 M
4.2.4	IQR = 8,9 °C – 2,35 °C ✓MA = 6,55 °C ✓A Range for High Temperature = 18,3 °C – 5,4 °C ✓MA = 12,9 °C ✓A difference = 12,9 °C – 6,55 °C ✓MCA = 6,35 °C ✓CA ≈ 6,4 °C ✓RCA Khethelo's statement is INCORRECT✓O	1MA subtracting 2,35 from 8,9 1A correct answer 1MA subtracting 5,4 from 18,3 1A correct answer 1MCA subtracting 6,55 from 12,9 1CA Simplifying 1RCA Rounding 1O opinion (8)	DH L4
		[32]	

QUESTION 5 [31 MARKS]			
5.1.1	Monthly Salary = R 584 300 ÷ 12✓MA = R48 691,67✓A	1MA dividing by 12 1A correct answer (2)	F L2 E
5.1.2	Gratuity = 6,72% × R584 300 × 30✓SF = R1 177 948,80✓S ≈ R1 200 000✓R Mbongeni's statement is CORRECT✓O	1SF substitution 1S simplifying 1R Rounding 1O opinion (4)	F L4 M
5.1.3	Annual annuity = $(\frac{1}{55}$ × R584 300 × 30) + R360✓SF = R319 069,09✓S Monthly annuity = R319 069,09 ÷ 12✓MCA = R26 589,09✓CA	1SF correct substitution 1S simplifying 1MCA dividing by 12 1CA correct answer (4)	F L3 M
5.1.4	IRR = $\frac{\text{R26 589,09}}{\text{R48 691,67}}$ × 100%✓SF ≈ 54,61%✓CA	**CA from 5.1.1&5.1.3** 1SF substitution 1CA correct answer (2)	F L2 M
5.2.1	Amount excluding VAT = R1 200 ÷ 115%✓MA = R1 043,48✓A VAT = R1 200 – R1 043,48✓MCA = R156,52✓CA **OR** VAT = R1 200 × $\frac{15✓MA}{115✓MA}$ = R156,52✓✓CA **OR** Amount excluding VAT = R1 200 × $\frac{100}{115}$✓MA = R1 043,48✓A VAT = R1 200 – R1 043,48✓MCA = R156,52✓CA	1MA dividing by 115% 1A correct answer 1MCA subtracting 1CA answer **OR** 1MA multiplying 15 1MA dividing by 115 2CA answer **OR** 1MA multiplying by $\frac{100}{115}$ 1A correct answer 1MCA for subtracting 1CA Correct answer (4)	F L3 M

5.2.2	R1200 – R156,52 = R1 043,48 Cost for 350 kWh in Block 1: 350 × R2,2162 = R775,67✓A Balance: R1 043,48 – R775,67 = R267,81✓CA Number of units in Block 2 = R267,81 ÷ R2,7110✓MCA = 98,79 kWh✓CA Total Units Received = 350 kWh + 98,79 kWh✓MCA = 448,79 kWh✓CA	**CA from Q5.2.1** 1A for R775,67 1CA for R267,81 1MCA for dividing by R2,7110 1CA correct answer 1MCA adding units 1CA answer (6)	F L3 D
5.3	R0,5 × 1 000 000 = R 500 000✓C Interest = 6,5 % ÷ 4 = 1,625%✓A ✓MA First Quarter =R 500 000 + (R 500 000 × 0,01625) = R 508 125✓A Second Quarter = R 508 125+ (R 508 125× 0,01625) = R 516 382,03✓CA Third Quarter = R 516 382,03+ (R 516 382,03 × 0,01625) = R 524 773,24✓CA Interest received = R 524 773,24 – R 500 000✓MCA = R 24 773,24✓CA His claim is correct ✓O	1C Conversion 1A for correct interest rate 1MA multiplying by 0,01625 1A answer 1CA Correct Answer 1CA Answer 1MCA for subtracting 1CA correct Interest 1O opinion (9)	F L4 M
		[31]	
		TOTAL MARKS: 150	