



education

Department:
Education
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

MATHEMATICAL LITERACY P1

SEPTEMBER 2026

MARKS: 150

TIME: 3 hours

**This question paper consists of 13 pages and
a SPECIAL ANSWER BOOK of 21 pages with 4 annexures.**

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FIVE questions.
2. Answer ALL the questions ONLY in the SPECIAL ANSWERBOOK 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.
8. Write neatly and legibly.

QUESTION 1

1.1 TABLE 1 below shows the best medical aid schemes in South Africa.

NOTE: GRC – Governance, Risk Management and Compliance rating

TABLE 1: BEST MEDICAL AID SCHEMES

MEDICAL AID SCHEME	PLANS UNDER R2 000	HELLO PETER TRUST INDEX	MONTHLY PREMIUMS FOR 2025	GRC RATING
Discovery Health	Yes	2,7	Starting from R1 184–R 11 430	AA+
Bonitas Medical Fund	Yes	4,3	Starting from R 1 154–R 11 321	AA+
Bestmed Medical Scheme	Yes	2,9	Starting from R1 615–R11 662	AA
Sizwe Hosmed	No	3,3	Starting from R2 636–R9 788	BBB+
Medihelp	Yes	2,7	Starting from R750–R14 184	AA-
Momentum	Yes	3,1	Starting from R589–R14 903	AA
Genesis Medical Scheme	Yes	4,1	Starting from R1 610–R3 200	AA+
Fed Health	Yes	3,3	Starting from R1 055–R16 937	AA-

[Source: Medicalaid.com]

Use TABLE 1 above to answer the questions that follow.

- 1.1.1 Write down the medical aid with a starting premium that is higher than R2 000. (2)
- 1.1.2 Determine the number of medical aid schemes with an AA+ GRC rating. (2)
- 1.1.3 Identify the medical aid scheme with a Hello Peter Trust Index of 4,1. (2)
- 1.1.4 Calculate the difference between the maximum monthly premium for Fed Health and Bonitas medical aid schemes. (3)

1.2

TABLE 2 below shows a simplified tax table for the tax year 2024/2025.

TABLE 1: SIMPLIFIED TAX TABLE FOR 2024/2025

TAX BRACKET	TAXABLE INCOME (R)	TAX RATE
1	0–237 100	18% of taxable income
2	237 101–370 500	R42 678 + 26% of taxable income above R237 100
3	370 501–512 800	R77 362 + 31% of taxable income above R370 500
4	512 801–673 000	R121 475 + 36% of taxable income above R512 800

Rebates for 2024/2025

Primary rebate (All tax payers) : R17 235

Secondary rebate (65 years and up): R9 444

Tertiary rebate (75 years and up) : R3 145

Medical Aid Tax Credit rates (per month)

R364 for the main member

R364 for the first dependant

R246 for each additional dependant

[Adapted from www.sars.gov.za]

Use TABLE 2 above to answer the questions that follow.

- 1.2.1 Name the rebate(s) that a 72-year-old taxpayer qualifies for. (2)
- 1.2.2 Explain the term *taxable income*. (2)
- 1.2.3 Write down ONE deduction that reduces the amount of tax payable. (2)
- 1.2.4 Identify the tax bracket for a taxable income of R474 878. (2)
- 1.2.5 Determine the monthly medical tax credit that a married taxpayer with one child will receive. (2)
- 1.2.6 Show how the amount of R42 678 in the second tax bracket was calculated. (2)

1.3

Dr Reid set up a monthly budget to determine his expenses and income.

TABLE 3: MONTHLY EXPENSES

CATEGORY	ESTIMATED COST (ZAR)
Rent/Lease	R17 500
Staff Salaries	R58 450
Utilities	R5 000–R8 000
Communication Costs	R3 000–R5 000
Medical Supplies	R5 000–R15 000
Stationary & Printing	R1 750
Insurance	R5 980
Waste Removal	R2 425
Security Services	R2 850
Professional Fees	±R3 500
Marketing and advertising	R2 500
Other	R2 955

Income

NOTE: Consulting fees R675 per patient

Use TABLE 3 above to answer the questions that follow.

- 1.3.1 Choose the correct word from those given in brackets. Write down only the word next to the question number (1.3.1).

A budget is (a deficit/ a surplus/balanced) when the income is more than the expenditure. (2)

- 1.3.2 Explain the concept *fixed costs* in this context (2)

- 1.3.3 Calculate the salary of a nurse if she receives 32,5% of the total amount budgeted for staff salaries. (3)

- 1.3.4 Dr Reid works 22 days per month.

Calculate the monthly consultation fees that Dr Reid will receive if he sees 15 patients per day. (2)

[30]

QUESTION 2

- 2.1 Dr Tredoux and Dr Serqi each decided to purchase a house, renovate it and use it as consulting rooms.

TABLE 4: HOME LOAN INFORMATION

DR TREDOUX	DR SERQI
Price: R1 325 000	Price: R1 325 000
Duration: 20 years	Duration: 25 years
Monthly installment: R13 676,50	Monthly installment: R11 576,48

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

- 2.1.1 Determine the number of months Dr Serqi will take to repay her home loan. (2)
- 2.1.2 Calculate the total amount Dr Tredoux will pay for his house over the full loan term. (3)
- 2.1.3 Calculate the difference in interest paid by the two doctors on their home loans. (6)
- 2.1.4 Dr Serqi pays an additional R750 per month on her home loan.
State ONE effect that the additional R750 will have on her home loan. (2)

- 2.2 Romero sold the property to Dr Serqi through an estate agent for R1 325 000.

Before Romero can sell the property, he must provide Dr Serqi with an electrical compliance certificate (COC). He was unable to pay for it before the house was sold and therefore arranged for the cost to be deducted from the selling price for the house.

- COC R9 750
- Agent commission: 2% of the cost price of the house
- Maintenance cost: R3 987 (paid by Romero before selling the house)

The original owner paid a levy of R6 250 upfront for 60 days. The property was registered on day 40. The levy for the remaining 20 days, is refunded to the original owner.

Calculate the total amount Romero received from the sale after all expenses and deductions have been accounted for. (6)

2.3

Dr Tredoux decided to paint his house. He obtained quotations from three different companies for the project.

TABLE 5 below compares the cost of hiring three different painting companies based on the number of days they would take to paint his house.

TABLE 5: COST OF HIRING THREE DIFFERENT PAINTING COMPANIES

DAY	COMPANY A	COMPANY B	COMPANY C
1	R850	R7 500	R4 000
2	R1 700	R7 500	R4 000
3	P	R7 500	R4 000
4	R3 400	R7 500	R4 000
5	R4 250	R7 500	R4 500
6	R5 100	R7 500	R5 000
7	R5 950	R7 500	Q
10	R8 500	R7 500	R7 000
12	R10 200	R7 500	R8 000

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

2.3.1 Identify the company that is most cost-effective for a 10-day job. (2)

2.3.2 Calculate the value of **P**, the cost of painting for three days with Company A. (2)

2.3.3 (a) Write a formula to calculate the cost of hiring Company C for more than 4 hours in the form:

Cost = ... (3)

(b) Calculate the missing value **Q**. (2)

2.3.4 The graphs showing the costs of hiring Company B and C are provided on the ANSWER SHEET.

Use TABLE 5 and the ANSWER SHEET provided, draw the line graph of Company A. (3)

[31]

QUESTION 3

- 3.1 During 2022, Statistics South Africa surveyed a sample of households in each province to determine their cellphone and computer usage.

TABLE 6 below shows the results of the survey.

TABLE 6: CELLPHONE AND COMPUTER USAGE BY HOUSEHOLDS

PROVINCE	% CELLPHONE USAGE	% COMPUTER USAGE	NUMBER OF HOUSEHOLDS
EASTERN CAPE	87,9	13,3	1 838 960
FREE STATE	93	19	845 250
GAUTENG	98,5	34	5 318 665
KWAZULU-NATAL	94	23,5	2 853 741
LIMPOPO	94	16	1 811 565
MPUMALANGA	96,1	16	1 421 721
NORTH WEST	94	17	1 141 284
NORTHERN CAPE	85,5	13,5	K
WESTERN CAPE	98,5	39,8	2 264 032

[Adapted from 2022 Census survey]

Use TABLE 6 above to answer the questions that follow.

- 3.1.1 Name the stage in the statistical cycle where collected data is categorised into two types. (2)
- 3.1.2 Identify the province(s) with the third lowest percentage of computer usage. (2)
- 3.1.3 Calculate the range of the percentage cellphone usage. (3)
- 3.1.4 Calculate the actual number of households in North West that did NOT use a computer. (3)
- 3.1.5 The mean (average) number of households surveyed per province is 1 980 974,556.
Calculate **K**, the actual number of households surveyed in the Northern Cape. Show ALL calculations. (5)
- 3.1.6 Identify a possible relationship or trend, between the cellphone and computer usage in South Africa. (2)
- 3.1.7 Determine, as a decimal fraction rounded to TWO decimal places, the probability of randomly selecting a province with a cellphone usage between 80% and 95%. (3)

- 3.2 Dr Dimitrio conducted a study of 13 adult patients' vital signs at a community clinic. He recorded each patients resting heart rate (bpm) and blood sugar levels(mg/dL).

TABLE 7: THE HEART RATE (BPM) AND BLOOD SUGAR LEVELS.

PATIENT	1	2	3	4	5	6	7	8	9	10	11	12	13
HEART RATE	58	62	67	73	68	60	66	70	76	80	65	82	78
BLOOD SUGAR	72	75	78	80	82	85	88	90	95	98	X	115	105

Clinical reference ranges:

- Resting heart rate: 60–100 bpm (adults)
- Fasting blood sugar: 70–99 mg/dL (normal)
 100–125 mg/dL (pre-diabetes)
 ≥ 126 mg/dL (diabetes)

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

- 3.2.1 Determine the lower quartile (Q_1) of the heart rates data. (3)

- 3.2.2 Calculate the unknown blood sugar value (X) if the interquartile range of the blood sugar data is equal to 20 mg/dL.

You may use the following formula:

$$IQR = Q_3 - Q_1 \quad (4)$$

- 3.2.3 The clinic will enrol patients in a lifestyle-counselling program if they meet both of the following criteria:

- A resting heart rate above 80 bpm, and
- A fasting blood sugar of 100mg/dL or higher

Identify which patient(s) qualify for the lifestyle-counselling program. Justify your answer with reference to the data in TABLE 7.

(3)
[30]

QUESTION 4

- 4.1 TABLE 8 below indicates the approved Level 2 and Level 3 domestic water tariffs for the City of Tshwane, effective from 1 July 2024 to 30 June 2025.
 (VAT excluded, per kilolitre)

Level 2: Standard domestic customers – mid-tier water users

Level 3: High volume users or households in higher-value properties – top-tier tariff bracket

TABLE 8: DOMESTIC WATER TARIFFS (R/kl) – Levels 2 & 3

DOMESTIC WATER USE		
SCALE	RAND PER KILOLITRE	RAND PER KILOLITRE
	LEVEL 2	LEVEL 3
Monthly access (flat) fee	163,96	163,96
0–9	0	0
10–18	34,75	41,68
19–30	58,45	105,78
31–42	72,18	158,75
43–60	86,89	225,86
> 60	103,38	310,08

[Adapted from thesouthafrican.com]

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

- 4.1.1 Calculate the median rand per kilolitre of level 3 users. (2)
- 4.1.2 Determine the total cost including VAT for consumption in the block 43–60 for level 2 users. (3)
- 4.1.3 Amia is a standard domestic customer, who received a bill of R539,08 excluding VAT.

Calculate the number of kilolitres of water she used. (7)

- 4.2 ANNEXURE A represents graph A for shifts in the consumer prices from December 2023 to December 2024 (year) and graph B for shifts in the consumer prices from November 2024 to December 2024 (month).

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

- 4.2.1 Identify the item with the lowest decrease in prices from November 2024 to December 2024. (2)

- 4.2.2 Sweet potatoes cost R19,33 per kilogram in November 2024.

Calculate the price per kilogram in December 2024. (3)

- 4.2.3 Determine, as a fraction in simplest form, the probability that the food and beverage percentage change, will be more than 5% from November 2024 to December 2024. (3)

- 4.2.4 A customer bought 6 tins of condensed milk for a total price of R239,94 in December 2024, and 8 packs of instant coffee @ R149,99 each in December 2024.

Verify, showing ALL calculations that the total price of the condensed milk and instant coffee would exceed R1 200 in December 2023. (6)

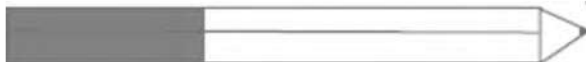
[26]

QUESTION 5

5.1 An Art shop makes and sells pencils decorated with spherical beads.

The beads are glued to the unsharpened end of the pencil, as shown below.

Beaded section



- A packet containing 1 000 beads cost R32,00.
- 480 beads are needed for 1 pencil.
- It takes 5 minutes to glue the beads onto one pencil.
- Workers are paid R62,50 per hour to glue the beads onto the pencils.
- The pencils used cost R35,00 per box of 12.

Use the information above to answer the questions that follow.

5.1.1 State ONE factor that determines the cost price of an item. (2)

5.1.2 The owners of the art shop plan to make a 35% profit on the sale of each pencil.

Verify, showing ALL calculations, that the selling price of each pencil must be R31,71 to make a 35% profit. (9)

5.1.3 A tourist from Tunisia bought some decorated pencils as souvenirs.

Calculate how many decorated pencils can be bought for 150 Tunisian Diner (TND) given the exchange rate below:

EXCHANGE RATE	
1 South African rand =	0,17 Tunisian Diner (TND)

5.1.4 The manager of the art shop is 33 years old and earns an annual taxable income of R325 204,25 for the 2024/2025 tax year.

She does not belong to a medical aid.

ANNEXURE B shows the annual tax table for individuals for the 2024/2025 tax year.

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

Calculate the managers' annual tax payable for the 2024/2025 tax year. (5)

5.2 The illness data is shown in the graph on ANNEXURE C in the answer book.

The data represents the estimated numbers of people (in millions) worldwide affected by Flu, Diabetes, and Hypertension across Children, Adults, and Seniors worldwide in 2025.

The world population is estimated to be approximately 8,23 billion.

A global health organisation estimates the following average annual treatment costs per person:

- Flu: \$50 per case
- Diabetes: \$600 per case
- Hypertension: \$400 per case

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

5.2.1 Name the type of graph represented in ANNEXURE C. (2)

5.2.2 Identify the estimated number of adults affected by Diabetes. (2)

5.2.3 Determine the percentage of adults affected by Flu out of the total number of people affected by Flu. (4)

5.2.4 The analyst estimated that the cost of treating seniors with Hypertension will be less than \$200 billion.

Verify, showing ALL calculations, whether her statement is CORRECT. (5)
 [33]

TOTAL: 150

Department:
Education
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



Senior Certificate Grade 12 - Preparatory exam 2026
Senior Sertifikaat Graad 12 - Voorbereidende eksamen 2026

CANDIDATE NAME NAAM VAN KANDIDAAT	
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DATE DATUM		BOOK NR BOEK NR		OF VAN		BOOKS BOEKE
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SUBJECT CODE VAKKODE					PAPER NUMBER VRAESTELNOMMER	1
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SUBJECT NAME VAKNAAM	MATHEMATICAL LITERACY WISKUNDIGE GELETTERDHEID
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MARKER NASIENER				MODERATOR'S INITIALS IN RELEVANT BLOCK MODERATOR VOORLETTERS IN KORREKTE BLOKKIE											
Question Vraag	Marks Punte			Marke Nasiener	Marks Punte	INTERNAL INTERN	Marks Punte	EXTERNAL EKSTERN	Marks Punte	SES VAKADVISEUR	Marks Punte	PROV	Mark Puntes	DBE	
1															
2															
3															
4															
5															
				TOTAL TOTAAL											

Please turn over/*Blaai om asseblief*

FOLLOW THESE INSTRUCTIONS CAREFULLY

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

VOLG HIERDIE INSTRUKSIES NOUKEURIG

1. Skryf jou naam en van in die spasie soos voorsien.
2. Beantwoord ALLE vrae SLEGS in die ruimtes wat in hierdie ANTWOORDEBOEK voorsien is. Ingeval jy bykomende ruimte benodig vir jou antwoorde.
 - 2.1. Gebruik die bykomende ruimte wat aan die einde van die ANTWOORDEBOEK voorsien word.
 - 2.2. As 'n vraag in die bykomende ruimte beantwoord word, dui duidelik die vraagnommer in die kolom aan die linkerkant aan.
3. Geen bladsye mag uit hierdie ANTWOORDEBOEK geskeur word nie.
4. Geen ANTWOORDEBOEK mag deur die kandidaat behou of uit die eksamenlokaal verwyder word nie.
5. Skryf die antwoorde so duidelik moontlik met swart/blou ink.
6. Laat die kantlyne oop.
7. Trek 'n netjiese lyn deur enige werk/rofwerk wat NIE nagesien moet word NIE.



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QUESTION 1/VRAAG 1

	Solution/Oplissing	Marks Punte
1.1.1		(2)
1.1.2		(2)
1.1.3		(2)
1.1.4		(3)
1.2.1		(2)
1.2.2		(2)
1.2.3		(2)
1.2.4		(2)
1.2.5		(2)
1.2.6		(2)
1.3.1		(2)
1.3.2		(2)
1.3.3		(3)

1.3.4		
		(2)
		[30]

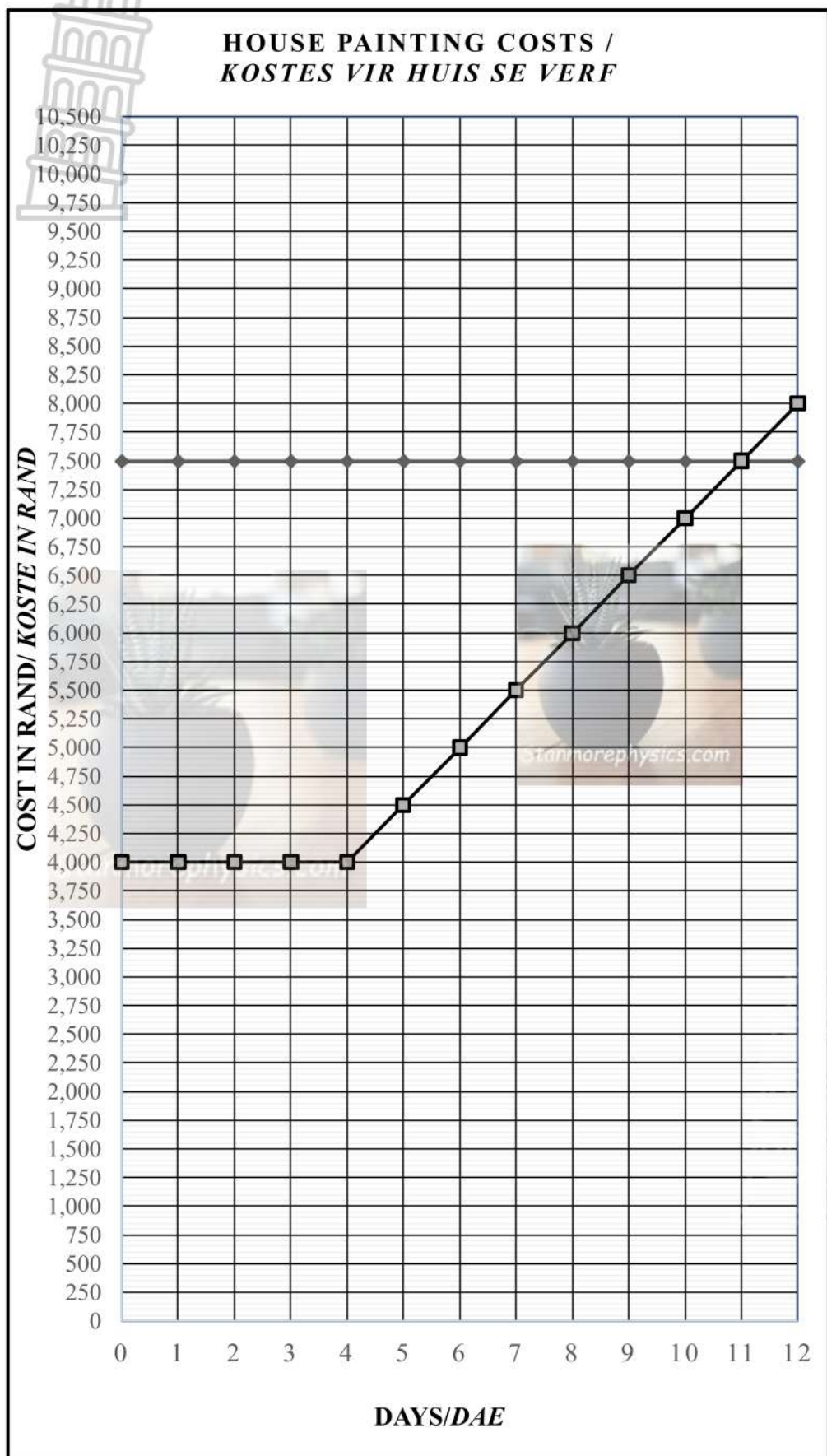
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QUESTION 2/VRAAG 2

	Solution/Oplissing	Marks Punte
2.1.1		(2)
2.1.2		(3)
2.1.3		(6)
2.1.4		(2)

Solution/Oplossing		Marks Punte
2.2		(6)
2.3.1		(2)
2.3.2		(3)
2.3.3		(3)
(a)		
2.3.3		(2)
(b)		
		[31]

2.3.4



**Company C/
Maatskappy
C**

**Company B/
Maatskappy B**

(3)

QUESTION 3/VRAAG 3

	Solution/Oplissing	Marks Punte
3.1.1		(2)
3.1.2		(2)
3.1.3		(3)
3.1.4		(3)
3.1.5		(5)
3.1.6		(2)
3.1.7		(3)

	Solution/Oplissing	Marks Punte
3.2.1		(3)
3.2.2		(4)
3.2.3		(3)
		[30]

ADDITIONAL SPACE / BYKOMENDE RUIMTE

	Solution/Oplissing	Marks

QUESTION 4/VRAAG 4

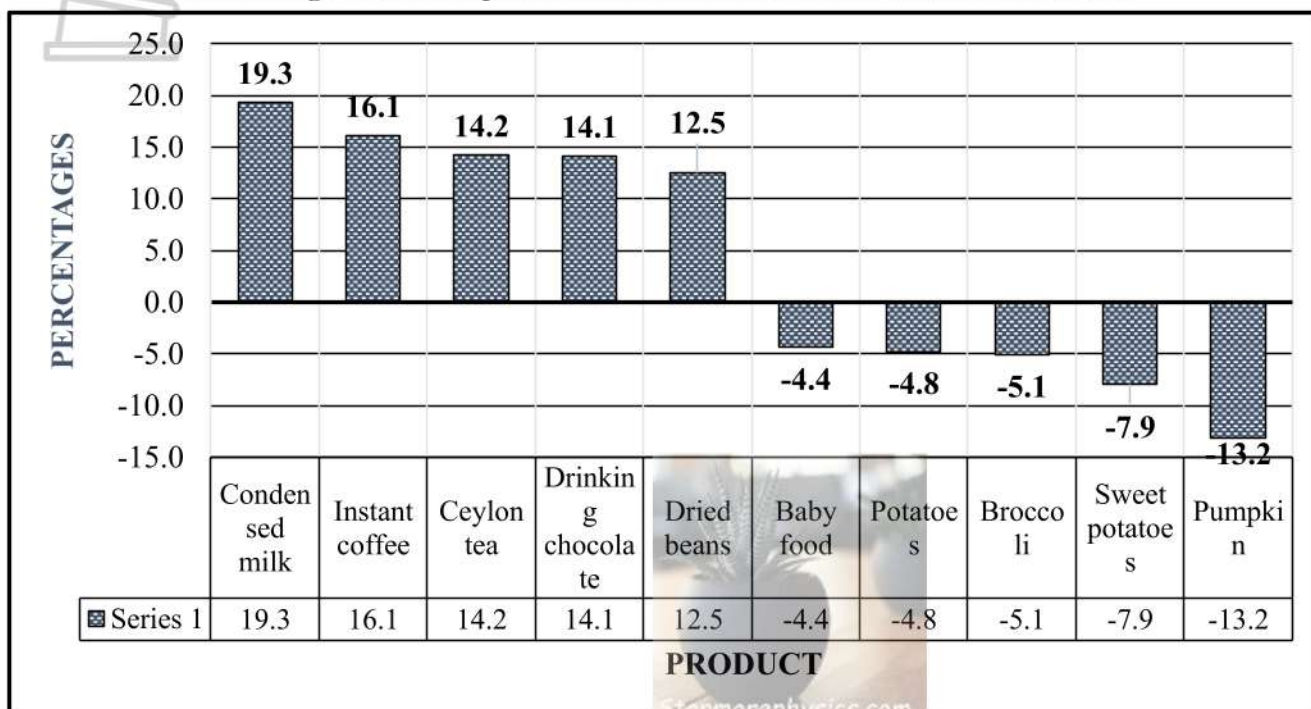
	Solution/Oplissing	Marks Punte
4.1.1		(2)
4.1.2		(3)
4.1.3		(7)

ANNEXURE A

QUESTION 4.2

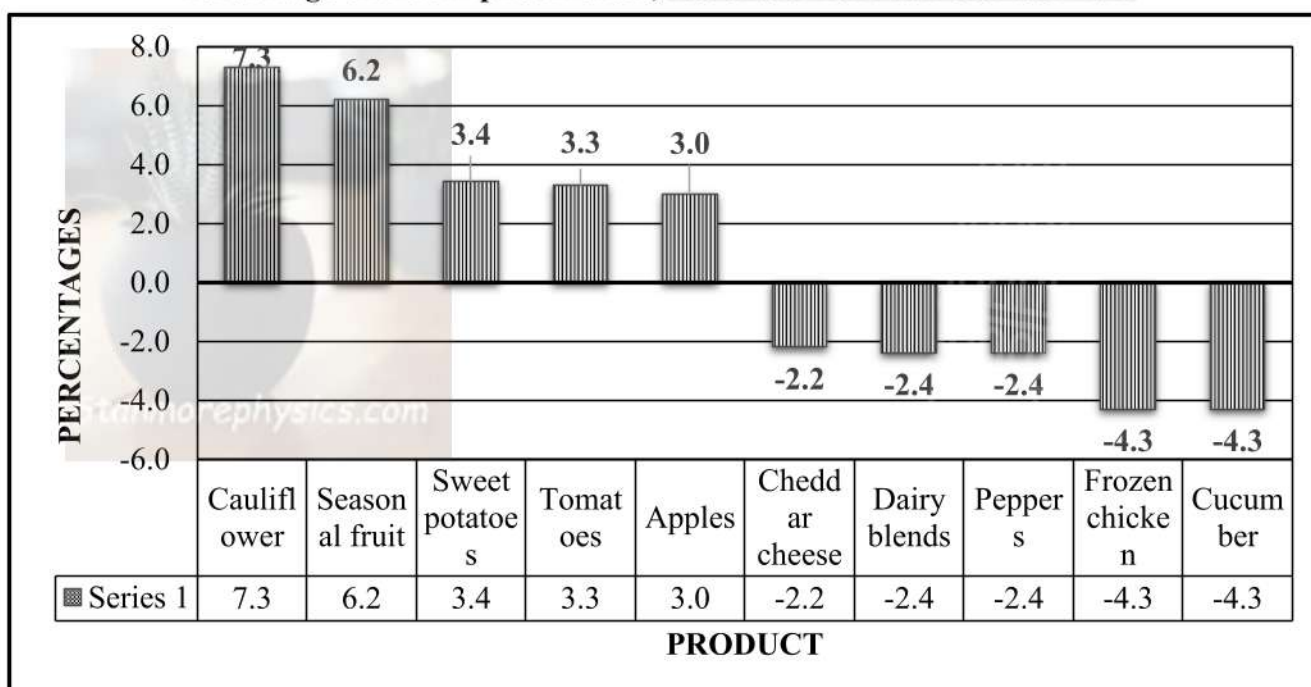
Food and beverage products that recorded the largest price increases and decreases over the last year.

Percentage change in price indices, December 2023 vs December 2024



Food and beverage products that recorded the largest price increases and decreases over the last month.

Percentage change in price indices, November 2024 vs December 2024



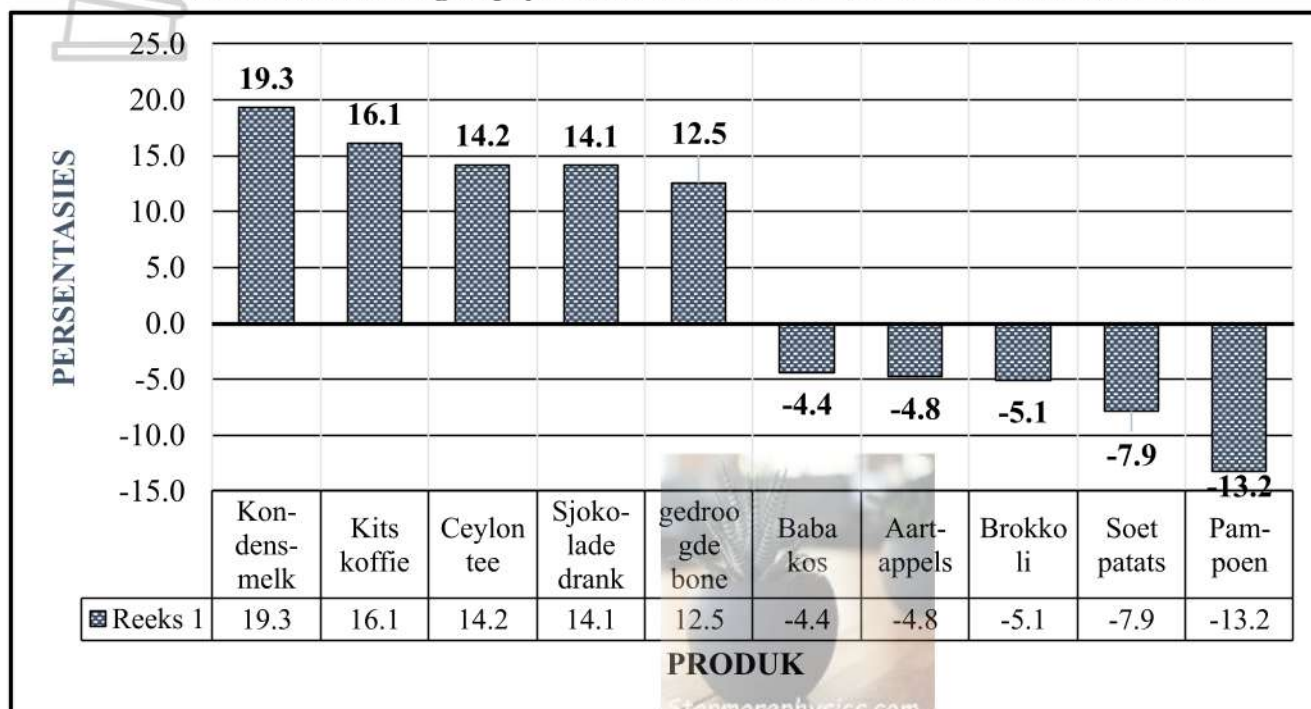
[Source: stats.sa]

BYLAAG A

VRAAG 4.2

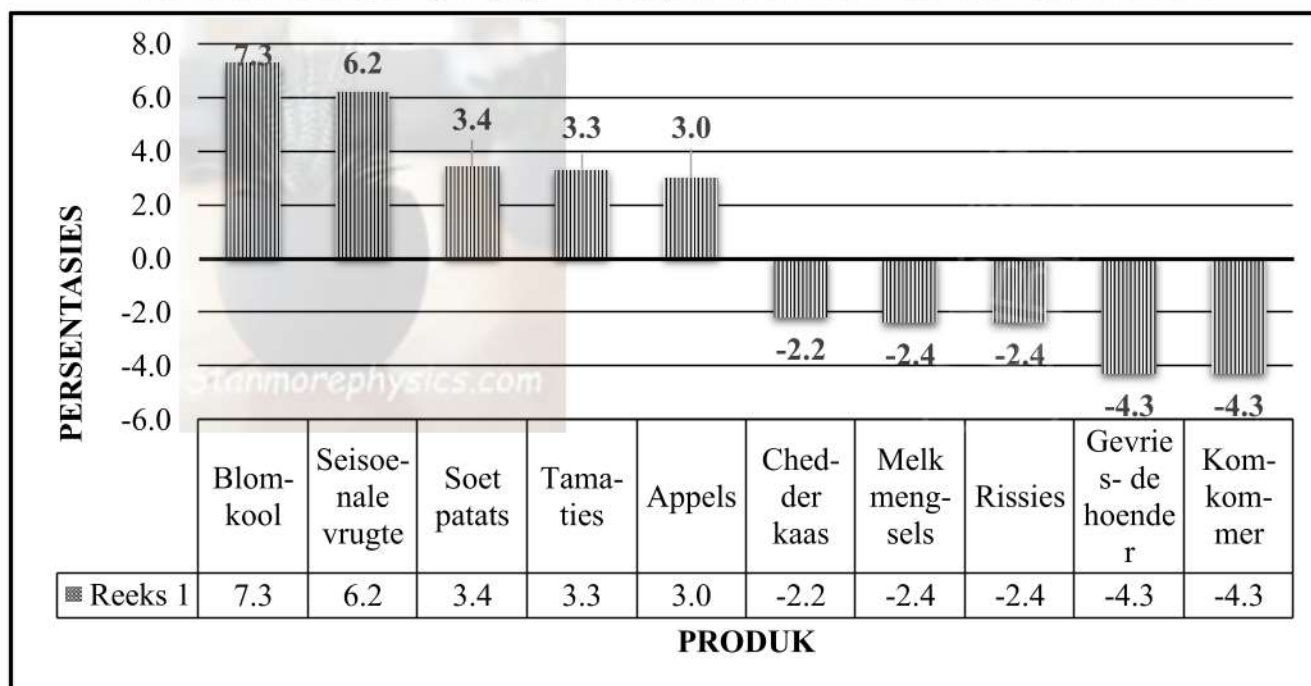
Kos en drank produkte wat die grootste prys verhogings en verlaging oor die laaste jaar getoon het.

Persentasie verandering in prys indekse, Desember 2024 teenoor Desember 2023



Kos en drank produkte wat die grootste prys verhogings en verlaging getoon het oor die laaste maand.

Persentasie verandering in prys indekse, November 2024 teenoor Desember 2023



[Source: stats.sa]

	Solution/Oplissing	Marks Punt
4.2.1		(2)
4.2.2		
4.2.3		(3)
4.2.4		
		[26]

QUESTION 5/VRAAG 5

QUESTION 5.1 (10)		
5.1.1		(2)
5.1.2		(9)
5.1.3		(4)
5.1.4		(5)

ANNEXURE B
QUESTION 5.1.4

TABLE 1: SIMPLIFIED TAX TABLE 2024/2025

Tax bracket	Taxable income (R)	Tax rate
1	0–237 100	18% of taxable income
2	237 101–370 500	R42 678 + 26% of amount above R237 100
3	370 501–512 800	R77 362 + 31% of amount above R370 500
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Rebates for 2024/2025

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Tertiary rebate (75 years and up): R3 145

Medical Aid Tax Credit rates (per month)

R364 for the main member

R364 for the first dependant

R246 for each additional dependant

[Adapted from www.sars.gov.za]

BYLAAG B
VRAAG 5.1.4

TABEL 1: VEREENVOUDIGDE BELASTING TABEL 2024/2025

Belasting kerf	Belasbare inkomste (R)	Belastingkoers
1	0–237 100	18% van belasbare inkomste
2	237 101–370 500	R42 678 + 26% van bedrag hier bo R237 100
3	370 501–512 800	R77 362 + 31% van bedrag hier bo R370 500
4	512 801–673 000	R121 475 + 36% van bedrag hier bo R512 800

Terugbetaling vir 2024/2025

Primêre terugbetaling (Alle belasting betalers): R17 235

Sekondêre terugbetaling (65 jaar en ouer): R9 444

Tersiêre terugbetaling (75 jaar en ouer): R3 145

Mediesefonds Kredietkoers (per maand)

R364 vir die hooflid

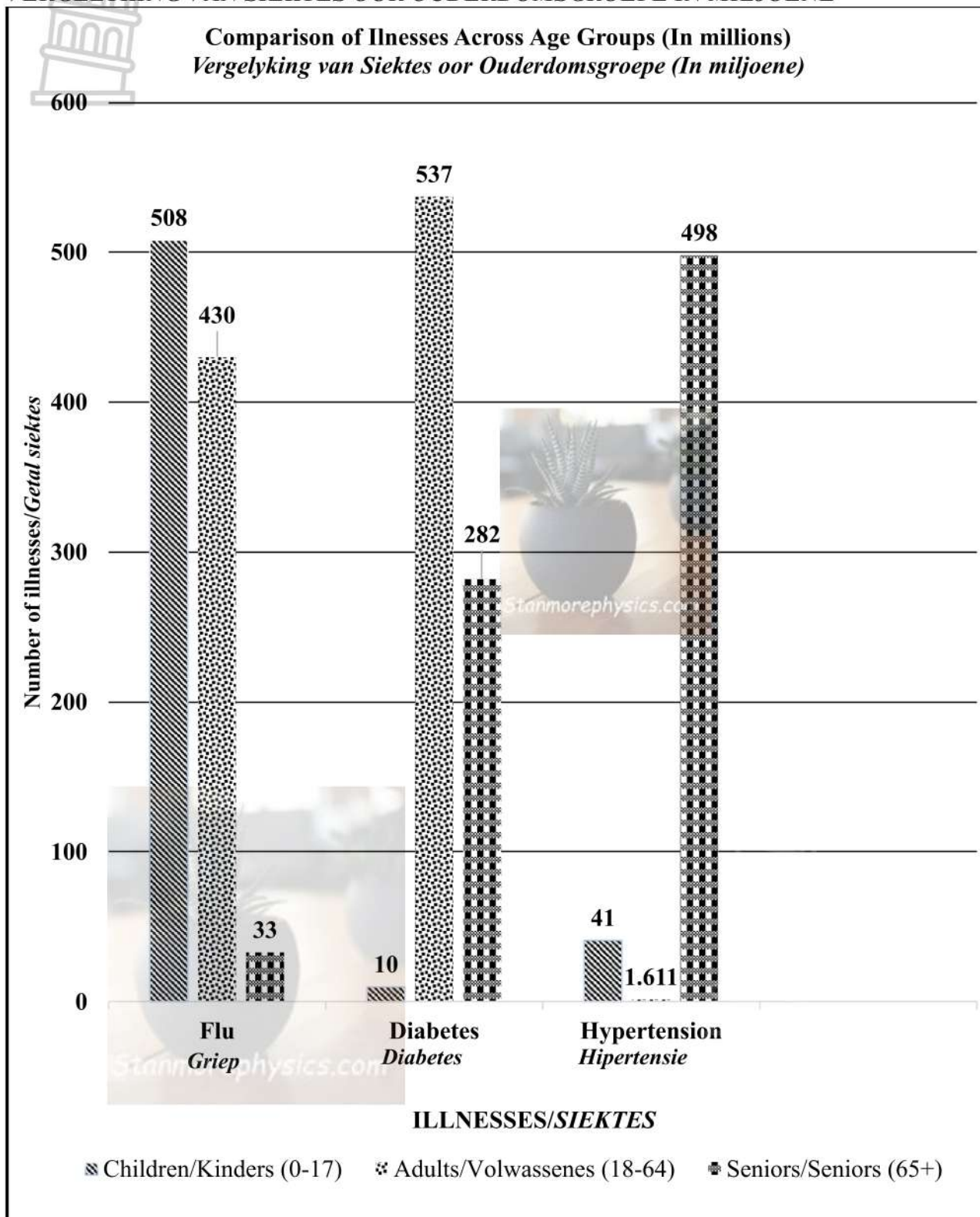
R364 vir die eerste afhanklike

R246 vir elke adisionele afhanklike

[Aangepas van www.sars.gov.za]

ANNEXURE B/BYLAAG B
QUESTION 5.2/VRAAG 5.2

COMPARISON OF ILLNESSES ACROSS AGE GROUPS IN MILLIONS
VERGELYKING VAN SIEKTES OOR OUDERDOMSGROEPE IN MILJOENE



[Source: World Health Organization]

5.2.1		
		(2)
5.2.2		
		(2)
5.2.3		
		(4)
5.2.4		
		(5)
		[33]

TOTAL/TOTAAL: 150

ADDITIONAL SPACE / BYKOMENDE RUIMTE[illegible]

Solution



Stanmorephysics.com



education

Department:
Education
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE/ NASIONALE SENIOR SERTIFIKAAT

GRADE/GRAAD 12

**MATHEMATICAL LITERACY P1/
WISKUNDIGE GELETERDHEID VI**

SEPTEMBER 2026

MARKING GUIDELINES/NASIENRIGLYNE

MARKS/PUNTE: 150

Symbol/Kode	Explanation/Verduideliking
M	Method/Metode
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
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 15 pages
Hierdie nasienriglyne bestaan uit 15 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.
- If the candidate presents any extra solution when reading from the graph, table, layout plan and map, then penalise for any 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 awarded if relevant calculations of at least $\frac{1}{3}$ of the maximum mark of the sub-question has been awarded.
- 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 op by die tweede berekeningsfout of 'breakdown'.*
- *Wanneer 'n kandidaat aflesings vanaf 'n grafiek, tabel, uitlegplan en kaart geneem en ekstra antwoorde gee, penaliseer vir elke ekstra item.*
- *Afrondings 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 van ten minste $\frac{1}{3}$ van die maksimumpunt van die subvraag toegeken is.*
- *Geen penalisering vir ronding (NPR) as die eerste desimaal korrek is nie, behalwe as vrae geld insluit.*

QUESTION/VRAAG 1 [30 MARKS/PUNTE] ANSWER ONLY FULL MARKS			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.1.1	✓✓A Sizwe Hosmed Medical Aid/Siswe Hosmed Mediese fonds	2A Sizwe Hosmed Medical Aid (2)	D L1 E
1.1.2	✓✓A 3 Medical aid schemes/Mediese fondsskemas	2A Medical Aid schemes (2)	D L1 E
1.1.3	✓✓A Genesis Medical aid/Genesis Mediese fonds	2A Genesis Medical Aid (2)	D L1 E
1.1.4	Difference/Verskil ✓✓A ✓RT ✓RT = R16 937 – R11 321 = R5 616 ✓A	1RT R16 937 1RT R11 321 1A answer (3)	F L1 M
1.2.1	✓A Primary rebate/primêre korting ✓A Secondary rebate/sekondêre korting	1A primary rebate 1A secondary rebate (2)	F L1 E
1.2.2	✓✓A Taxable income is the amount on which tax will be calculated. / Belasbare inkomste is die bedrag waarop belasting bereken sal word. OR/OF ✓✓A Taxable income is the gross salary minus the pension fund contribution/Belasbare inkomste is die bruto salaris minus die pensioenfondsbydrae.	2A answer (2)	F L1 E
1.2.3	Pension fund/pensioenfondsbydrae ✓✓A OR/OF Provident fund/ retirement annuity ✓✓A Voorsorgfonds/ aftree annuïteit OR/OF Donations/ travel expenses/ medical tax credits ✓✓A Donasies/ reis uitgawes/ mediese belastingskrediete	2A answer (2)	F L1 E

1.2.4	$\checkmark\checkmark$ A Tax bracket 3/ <i>Belastingkerf 3</i> $\checkmark\checkmark$ A OR/OF $370\,501 - 512\,800$	2A Tax bracket 3 Accept: R77 362 + 31% of taxable income above R370 500 (2)	F L1 E
1.2.5	Monthly tax credit/ <i>Maandelikse belasting krediet</i> $\checkmark$ MA $= (R364 \times 2) + 246$ $= R974$ $\checkmark$ A	1MA $(R364 \times 2) + 246$ 1A answer (2)	F L1 E
1.2.6	$\checkmark$ RT $\checkmark$ MA $237\,100 \times 18\%$ $= R42\,678$	1RT R237 100 1MA multiply by 18% (2)	F L1 M
1.3.1	$\checkmark\checkmark$ A Surplus/ <i>Oorskot</i>	2A correct answer (2)	F L1 E
1.3.2	$\checkmark\checkmark$ A Costs that remains the same every time/ <i>Koste wat elke keer dieselfde bly</i>	2A correct answer (2)	F L1 E
1.3.3	$\checkmark$ MA $\checkmark$ R $32,5\% \times R58\,450$ $= R18\,996,25$ $\checkmark$ A	1RT R58 450 1MA multiplying by 32,5% 1A correct answer (3)	F L1 M
1.3.4	$\checkmark$ MA $15 \times R675 \times 22$ days/ <i>dae</i> $= R222\,750$ $\checkmark$ A	1MA multiplying 15 and 22 by R675 1A correct answer (2)	F L1 E
[30]			

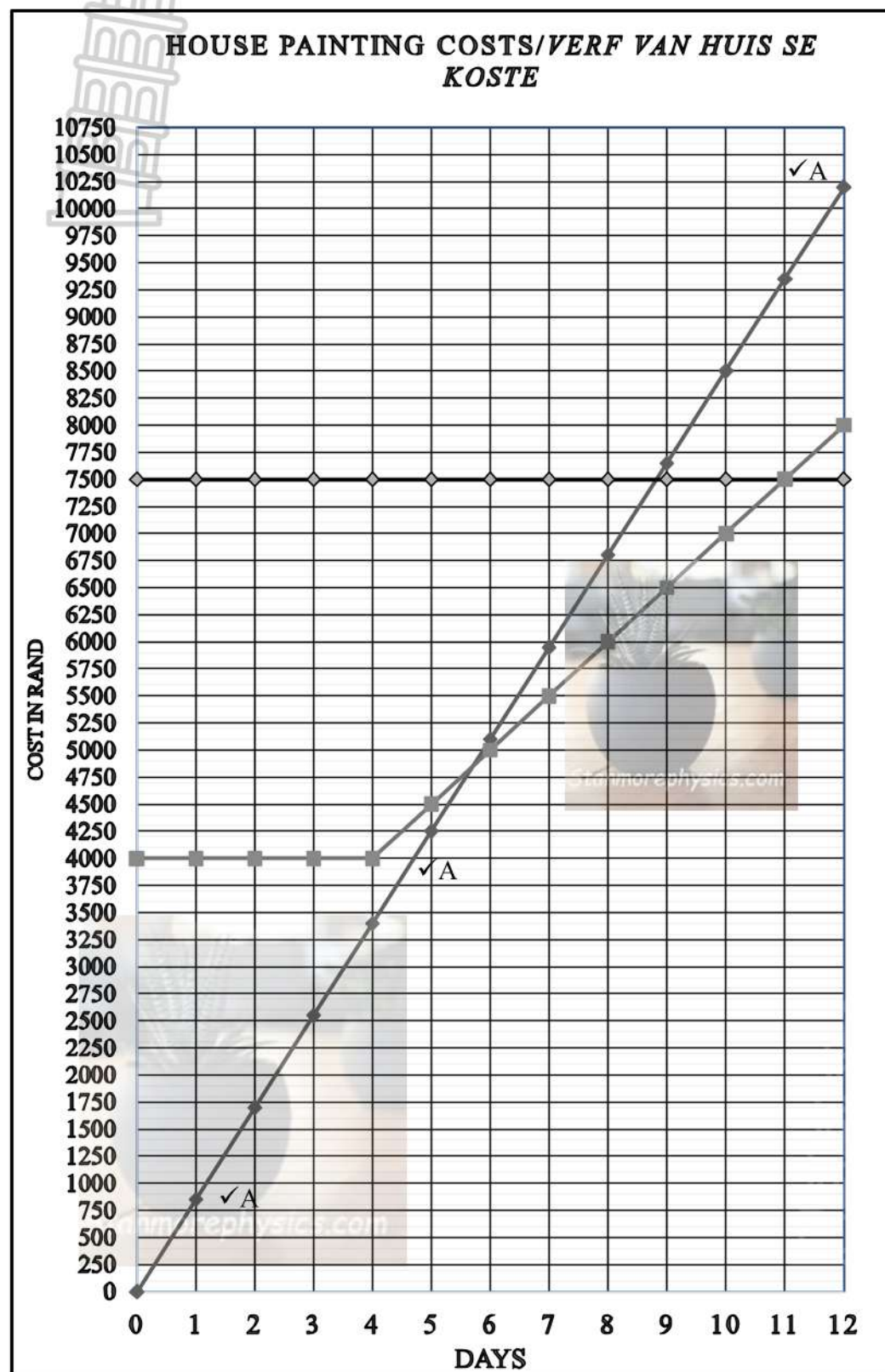
QUESTION/VRAAG 2 [31 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.1.1	$12 \times 25 \checkmark \text{ MA}$ $= 300 \text{ months/maande} \checkmark \text{ A}$	1MA multiplying 25 by 12 1A answer AO (2)	F L1 E
2.1.2	$\checkmark \text{ RT}$ $\text{R13 } 676,50 \times (12 \times 20)$ $= \text{R13 } 676,50 \times 240 \checkmark \text{ MA}$ $= \text{R3 } 282\,360,00 \checkmark \text{ CA}$	1RT R13 676,50 1MA multiply 240 1CA correct answer AO (3)	F L2 E
2.1.3	Dr Serqi $\text{R11 } 576,48 \times 300 \checkmark \text{ MCA}$ $= \text{R3 } 472\,944,00 - \text{R1 } 325\,000 \checkmark \text{ MCA}$ $= \text{R2 } 147\,944,00 \checkmark \text{ CA}$ Dr Tredoux $\text{R3 } 282\,360,00 - \text{R1 } 325\,000$ $= \text{R1 } 957\,360,00 \checkmark \text{ CA}$ Interest difference/Rente verskille $\therefore \text{R2 } 147\,944,00 - \text{R1 } 957\,360 \checkmark \text{ MCA}$ $= \text{R190 } 584 \checkmark \text{ CA}$	CA from 2.1.1 and 2.1.2 1MCA multiply correct value with 300 1MCA subtraction 1CA simplification 1CA simplification 1MCA subtraction 1CA simplification (6)	F L3 M
2.1.4	The duration of the loan will be less/ <i>Die duur van die lening sal minder wees</i> OR/OF $\checkmark \checkmark \text{ A}$ The interest on the loan will be less/ <i>Die rente vir die lening sal minder wees</i> OR/OF The total amount for the loan will be less/ <i>Die totale bedrag vir die lening sal minder wees.</i>	2A opinion	F L4 M

Q/V	Solution/Oplissing	Explanation/ Verduideliking	T&L
2.2	Total amount received/Totale bedrag ontvang Agent cost/Agent koste $R1\,325\,000 \times 2\% \checkmark$ MA $= R26\,500 \checkmark$ A Electrical compliance certificate/Elektriese voldoeningsertifikaat $R9\,750$ Levy back to owner/Heffing terugbetaal aan eienaar $\frac{1}{3} \times R6\,250 \checkmark$ MA $= R2\,083,33 \checkmark$ A Maintenance/Onderhoud $R3\,987 \checkmark$ MCA $R1\,325\,000 - (R26\,500 + R9\,750 + R3\,987) + R2\,083,33$ $= R1\,286\,846,33 \checkmark$ CA	1MA multiplying by 2% 1A two percent of cost price 1MA multiply correct value with $\frac{1}{3}$ 1A answer 1MCA adding and subtract correct values 1CA simplification (6)	F L3 D
2.3.1	Company C/Maatskappy C $\checkmark\checkmark$ RT	2RT company C (2)	F L1 E
2.3.2	Cost/Koste $\checkmark$MA $P = R850 \times 3$ $P = R2\,250 \checkmark$ A OR/OF $P = R1\,700 + R850 \checkmark$MA $P = R2\,250 \checkmark$ A	1MA multiply by 3 1CA simplification OR 1MA Add R850 1CA simplification AO (2)	F L2 E
2.3.3 (a)	$Q = R4\,000 + 500 \times [(number\ of\ hours / hoeveelheid\ ure) - 4] \checkmark$ A	1A R4 000 1A $\times$ Number of hours – 4 1A +500 (3)	F L2 M

2.3.3 (b)	Cost/Koste $B = R4\,000 + R500 \times [(\text{number of hours / hoeveelheid ure}) - 4] \quad \checkmark S$ $B = R4\,000 + R500 \times [7 - 4]$ $B = R5\,500 \quad \checkmark CA$	1SF correct substitution 1CA answer AO (2)	F L2 M
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2.3.4

F
L2
M



Company A/
Maatskappy
A

Company C/
Maatskappy
C

Company B/
Maatskappy
B

1A point (1 ; 850)

1A end point (12 ; 10 200)

1A join the points (Mark to be allocated if the graph start at (0 ; 0)

(3)

[31]

QUESTION/VRAAG 3 [30 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/ Verduideliking	T&L
3.1.1	✓✓A Classifying data/Klassifiseer data	2A correct answer (2)	D L1 E
3.1.2	Limpopo ✓A Mpumalanga ✓A	1A correct province 1A correct province (2)	D L2 M
3.1.3	Range = max value – min value Omvang = maksimum waarde – minimum waarde = 98,5 – 85,5 ✓RT = 13 ✓MA ✓CA	1RT both correct values 1MA concept of range 1CA correct answer (3)	D L2 E
3.1.4	17% × 1 141 284 = 194 018,28 ✓A Did not use computers/Het nie rekenars gebruik nie ✓MCA = 1 141 284 – 194 018,28 = 947 265,72 = 947 265 OR 947 266 ✓CA OR/OF Did not use computers/Het nie rekenars gebruik nie ✓A = (100% - 17%) × 1 141 284 = 83% × 1 141 284 ✓MCA = 947 265,72 = 947 265 OR/OF 947 266 ✓CA	1A number using computers 1MCA subtraction 1CA rounding up or down OR/OF 1A 83% 1MCA multiplying 1CA rounding up or down (3)	D L2 M

Q/V	Solution/Oplissing	Explanation/ Verduideliking	T&L
3.1.5	Total number of households surveyed/<i>Totale hoeveelheid huishoudings ondersoek</i> $= 1\,980\,974,556 \times 9$ ✓MA $= 17\,828\,771$ ✓A Number surveyed in the NC/<i>Hoeveelheid ondersoek in die NK</i> ✓MA $= 17\,828\,771 - (1\,838\,960 + 845\,250 + 5\,318\,665 + 2\,853\,741 + 1\,811\,565 + 1\,421\,721 + 1\,141\,284 + 2\,264\,032)$ $= 17\,828\,771 - 17\,495\,218$ ✓MA $= 333\,553$ ✓CA OR/OF $1\,980\,974,556 = \frac{K + 17\,495\,218}{9}$ ✓MA $1\,980\,974,556 \times 9 = K + 17\,495\,218$ ✓MA $K = 17\,828\,771 - 17\,495\,218$ ✓MCA $K = 333\,553$ ✓CA	1MA reverse mean calculation 1A total surveyed 1MA concept of mean 1MCA adding and subtracting known values 1CA simplification OR/OF 1MA concept of mean 1MA $K + 17\,495\,218$ 1MA multiplying mean by 9 1MCA subtraction 1CA simplification (5)	D L3 D
3.1.6	✓✓O The provinces with a high cellphone usage have a corresponding high computer usage/<i>Die provinsies met 'n hoë selffoon gebruik het 'n ooreenstemmende hoë rekenaar gebruik.</i> OR/OF The provinces with a low cellphone usage have a corresponding low computer usage/<i>Die provinsies met 'n lae selffoongebruik het 'n ooreenstemmende lae rekenaar gebruik.</i>	2O opinion (2)	D L4 M
3.1.7	Probability/<i>Waarskynlikheid</i> ✓A $= \frac{6}{9}$ ✓A $= 0,67$ ✓CA	1A numerator 1A denominator 1CA answer rounded correctly (3)	P L2 M

Q/V	Solution/Oplissing	Explanation/ Verduideliking	T&L
3.2.1	58; 60; 62; 65; 66; 67; 68; 70; 72; 75; 76; 80; 82 ✓A Quartile / Kwartiel 1 = $\frac{62 + 65}{2}$ ✓MA Q1 = 63,5 ✓CA	1A correct ordered data 1MA concept 1CA correct answer (3)	D L2 E
3.2.2	72; 75; 78; 80; 82; 85; 88; 90; 95; 98; X ;110; 115 Quartile / Kwartiel 1 = $\frac{78 + 80}{2}$ = 79 ✓A IQR = Quartile 3 – Quartile 1 IKO = Kwartiel 3 = Kwartiel 1 20 = Q₃ – 79 ✓SF Q₃ = 20 + 79 ✓MCA Q₃ = 99 ✓CA	1A correct quartile 1 1SF substitution in correct formula 1MCA changing the subject 1CA correct quartile 3 (4)	D L3 M
3.2.3	✓A From the table only Patient 12 meets the criteria. <i>Vanaf die tabel voldoen slegs Pasiënt 12 aan die kriteria.</i> ✓O Criteria > 80 bpm and glucose ≥ 100 mg/dL <i>Kriteria > 80 bpm en glukose ≥ 100 mg/dL</i> ✓O The patient has a heartrate of 82 bpm and glucose of 115mg/dL <i>Die pasiënt het 'n hartklop van 82 bpm en glukose van 115 mg/dL</i>	1A Patient 12 1O stating criteria 1O patient's information (3)	D L4 M
		[30]	

QUESTION/VRAAG 4 [26 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/ Verduideliking	T&L
4.1.1	$\text{Median/Medianaan} = \frac{R105,78 + R158,75}{2}$ $= R132,27 \quad \checkmark A$	1MA concept 1A correct answer (2)	D L2 E
4.1.2	$\text{Cost including VAT/Koste sluit BTW in}$ $= R86,89 \times 115\% \quad \checkmark RT \quad \checkmark MA$ $= R99,92 \quad \checkmark CA$ OR/OF $\text{VAT amount/BTW bedrag} = R86,89 \times 15\% \quad \checkmark RT \quad \checkmark MA$ $= R13,03$ $\text{Cost incl VAT/Koste sluit BTW in}$ $= R86,89 + R13,03$ $= R99,92 \quad \checkmark CA$	1RT correct value 1MA multiplying by 115% 1CA simplification OR/OF 1RT correct value 1MA multiplying by 15% 1CA simplification (3)	F L2 E
4.1.3	$\text{Number of kilolitres/Aantal kiloliters}$ $R539,08 - R163,96 \quad \checkmark MA$ $= R375,12 \quad \checkmark A$ $\text{Amount for block 1/Bedrag vir blok 1}$ $= 9 \times 0 = 0$ $\text{Amount for block 2/Bedrag vir blok 2}$ $= 9 \times R34,75 = R312,75 \quad \checkmark A$ $\text{Amount left/bedrag wat oor is}$ $= R375,12 - R312,75$ $= R62,37 \quad \checkmark CA$ $\text{Units in block 3/Eenhede in blok 3}$ $= R62,37 \div 58,45 \quad \checkmark MCA$ $= 1,067065868$ $\text{Total kl used/Totale kl gebruik}$ $= 9 \text{ kl} + 9 \text{ kl} + 1,067065868 \quad \checkmark MCA$ $= 19,067 \text{ kl} \quad \checkmark CA$	1MA subtract the access fee 1A simplification 1A amount for block 2 1CA remaining amount 1MCA dividing by tariff MCA adding values 1CA answer NPR (7)	F L3 D

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.2.1	✓RT Frozen chicken/Gevriesde hoender Cucumber/Komkommer ✓RT	1RT correct item 1RT correct item (2)	D L1 E
4.2.2	$R19,33 \times 3,4\%$ $= 0,65722$ ✓MA $R19,33 + 0,62722$ ✓MCA $= R19,99$ ✓CA OR/OF $R19,33 \times 103,4\%$ ✓✓MA $R19,99$ ✓CA	1MA multiplying with 3,4% 1MCA adding to original price 1CA answer correctly rounded 2MA multiplying with 103,4% 1CA answer (3)	F L2 M
4.2.3	$\frac{2}{10}$ ✓A $\frac{1}{5}$ ✓A $= \frac{1}{5}$ ✓CA	1A correct numerator 1A correct denominator 1CA simplification (3)	P L2 E
4.2.4	Condensed milk in December 2023/ Kondensmelk in Desember 2023 ✓MA $R239,94 \div 1,193$ OR $\left[\frac{119,3}{100}\right]$ OR $\left[239,94 \times \frac{119,3}{100}\right]$ ✓A $= R201,12$ Instant coffee in December 2023/ Kitskoffie in Desember 2023 $8 \times R149,99$ $= R1\ 199,92$ ✓A $R1\ 199,92 \div 1,161$ OR $\left[\frac{116,1}{100}\right]$ OR $\left[1\ 199,92 \times \frac{116,1}{100}\right]$ ✓CA $= R1\ 033,52$ Total price/Totale prys $R201,12 + R1\ 033,52$ $= R1\ 234,64$ ✓CA His statement is CORRECT/ Sy verklaring is KORREK ✓O	1MA divide by 1,193 1A answer 1A answer instant coffee 1CA answer 1CA answer 1O opinion (6)	F L4 M
		[26]	

QUESTION/VRAG 5 [33 MARKS/PUNTE]			
Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
5.1.1	$\checkmark\checkmark A$ Production costs OR operating costs/ <i>Produksiekoste OF bedryfskoste</i>	2A correct answer (2)	F L1 E
5.1.2	$\checkmark MA$ Cost of labour for beading = $\frac{5}{60} \times R62,50$ <i>Arbeidskoste vir kralewerk</i> $= R5,21 \quad \checkmark A$ Cost price of a pencil = $\frac{R35,00}{12} \quad \checkmark MA$ <i>Kosprys vir 'n potlood</i> $= R2,92 \quad \checkmark A$ Cost of beads = $\frac{480}{1\,000} \times R32,00 \quad \checkmark MA$ <i>Koste van krale</i> $= R15,36 \quad \checkmark CA$ Cost price of a beaded pencil = $R5,21 + R2,92 + R15,36$ <i>Kosprys van potlood met krale</i> $= R23,49 \quad \checkmark CA$ $\% \text{ Selling price} = 100\% + 35\% = 135\%$ $\% \text{ Verkoopprys}$ $\text{Selling Price} = 135\% \times R23,49 \quad \checkmark MCA$ <i>Verkoopprys</i> $= R31,71$ The statement is CORRECT/ <i>Die verklaring is KORREK</i> $\checkmark O$	1MA multiplying by correct fraction 1A simplification 1MA division 1A simplification 1MA dividing and multiplying 1CA simplification 1CA total cost 1MCA multiplying by 135% 1O opinion (9)	F L4 D
5.1.3	Price/pencil/prys/potlood = R31,71 $R1 = 0,17 \text{ Tunisian Diner/Tunisiëse Restaurant}$ $R31,71 = \text{TND } 0,17 \times R31,71 \quad \checkmark C$ $= 5,3907 \text{ TND} \quad \checkmark CA$ Number of pencils/hoeveelheid potlode $= \frac{\text{TND } 150}{\text{TND } 5,3907} \quad \checkmark MCA$ $= 27,8256$ $= 27 \quad \checkmark R$	CA selling Price from 5.1.2 1C conversion 1CA simplification 1MCA division 1R rounded answer (4)	F L2 M

Q/V	Solution/Oplossing	Explanation Verduideliking	T&L
5.1.4	Tax before rebate/ <i>Belasting voor aftrekkings</i> $= R42\,678 + 26\% (R325\,204,25 - R237\,100)$ $= R42\,678 + 26\% (R88\,104,25)$ $= R65\,585,105$ Annual tax payable/ <i>jaarlikse betaalbare belasting</i> $= R65\,585,105 - R17\,235$ $= R48\,350,11$	1A correct bracket 1SF correct substitution 1CA simplification 1RT rebate: R17 235 1CA simplification (5)	F L3 M
5.2.1	$537\,000\,000$ Multiple bar graph/ <i>Meervoudige staafgrafiek</i> OR/OF Compound bar graph/ <i>Saamgestelde staafgrafiek</i>	2A correct answer (2)	D L1 E
5.2.2	$537\,000\,000$ 537 million/ <i>miljoen</i>	2A correct answer (2)	D L1 E
5.2.3	$= \frac{430}{(508+430+33)} \times 100$ $= \frac{430}{971} \times 100$ $= 44,28\%$	1RT correct numerator 1MA divide by 971 1MA multiplying by 100 1CA correct answer (4)	D L2 M
5.2.4	Seniors with hypertension/ <i>Seniors met hipertensie</i> $498 \text{ million} \times \$400$ $= \$199\,200 \text{ million}$ $\$199\,200 \text{ million} \div 1\,000$ $= \$199,2 \text{ billion}$ His statement is CORRECT/ <i>Sy verklaring is KORREK</i>	1RT correct value 1MA multiplying by \$400 1MCA dividing with 1000 1CA correct answer 1O correct opinion (5)	D/F L4 D
		[33]	
		TOTAL/TOTAAL: 150	