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Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

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

MATHEMATICAL LITERACY P1/WISKUNDIGE GELETTERDHEID V1

2023

MARKING GUIDELINES/NASIENRIGLYNE

MARKS/PUNTE: 150

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

**These marking guidelines consist of 19 pages.
*Hierdie nasienriglyne bestaan uit 19 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 a graph, table, layout plan and map, then penalise for every extra item presented.
- Rounding is an independent mark.
- General principle of marking, if the candidate makes one mistake he loses one mark.
- A conclusion mark can only be given if relevant calculations precedes it.

LET WEL:

- As 'n kandidaat 'n vraag TWEE KEER beantwoord, sien slegs die EERSTE poging na.
- As 'n kandidaat 'n antwoord van 'n vraag doodtrek (kanselleer) en nie oordoen nie, sien die doodgetrekte (gekanselleerde) poging na.
- Volgehoue akkuraatheid (CA) word in ALLE aspekte van die nasienriglyne toegepas; dit hou egter op by die tweede berekeningsfout.
- Wanneer 'n kandidaat aflesings vanaf 'n grafiek, tabel, uitlegplan en kaart geneem en ekstra antwoorde gee, penaliseer vir elke ekstra item.
- Afronding tel as 'n afsonderlike punt.
- Die algemene beginsel van merk as 'n leerder een fout maak verloor hy een punt.
- 'n Gevolgtrekkingspunt kan slegs gegee word indien relevante berekeninge dit voorgaan.

QUESTION/VRAAG 1 [31 MARKS/PUNTE] ANSWER ONLY FULL MARKS			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
* 1.1.1	<div style="text-align: center;"> $\checkmark A$ $\checkmark A$ Hire-purchase / online credit (Mobicred) / Cash price. OR/OF <i>Huurkoop / aanlyn krediet (Mobicred) / Kontant prys.</i> <i>(Any two/Enige twee)</i> </div>	1A first method 1A second method (2)	F L1
* 1.1.2	You buy the generator at a monthly installment. Only after your final installment you own the generator. <i>Jy koop die generator teen 'n maandelikse paalement.</i> <i>Slegs na die laaste paalement het jy die generator $\checkmark\checkmark A$ gekoop.</i>	2A correct explanation (2)	F L1
1.1.3	14,75% $\checkmark\checkmark RT$	2RT correct percentage (2)	F L1
1.1.4	Total cost / <i>totale koste</i> $\checkmark MA$ $R1\ 006 \times 12$ $= R12\ 072$ $\checkmark A$	1MA multiply by 12 1A simplification (2)	F L1

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
1.1.5	Discount / <i>afslag</i> $= R10\,999 \times \frac{12,5}{100} \checkmark \text{MA}$ $= R1\,374,88 \checkmark \text{A}$	1MA calculating 12,5% 1A amount discount <div style="border: 1px solid black; padding: 2px;">Accept: R1 374,90 OR R1 375</div> (2)	F L1
1.1.6	Simple Interest / <i>Enkelvoudige rente</i> $\checkmark \checkmark \text{A}$	2A simple interest (2)	F L1
* 1.2.1	Ascending order / <i>Stygende orde</i> $\checkmark \text{RT}$ -17,4%; - 6,7%; - 1,1%; 10,1%; 42,7%; 90,1%; 122,2% $\checkmark \text{A}$	1RT correct values 1A ascending order (2)	D L1
* 1.2.2	Sport skirt / <i>Sport rompie</i> $\checkmark \checkmark \text{RT}$	2RT correct item (2)	D L1
1.2.3	Difference / <i>Verskil</i> $= R171,00 - R89,95 \checkmark \text{MA}$ $= R81,05 \checkmark \text{A}$	1MA subtracting correct values 1A difference (2)	F L1
1.2.4	Total cost / <i>totale koste</i> $= R267,92 + R214,17 + R248,70 + R267,78$ $+ R87,75 + R48,58 + R89,95 \checkmark \text{MA}$ $= R1\,224,85 \checkmark \text{CA}$	1MA adding correct values 1CA simplification <div style="border: 1px solid black; padding: 2px;">CA only if 1 value omitted</div> (2)	F L1
* 1.2.5	Shinpads / <i>Skeenskud</i> OR/OF $\checkmark \checkmark \text{A}$ Hockey shoes / <i>Hokkieskoene</i> . <i>(Any hockey related equipment)</i>	2A correct item (2)	D L1

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
* 1.3.1 (a)	EC / OK ✓✓RT	2RT correct province (2)	D L1
* 1.3.1 (b)	WC / WK ✓✓RT	2RT correct province (2)	D L1
1.3.2	No province / <i>Geen provinsie</i> OR/OF ✓✓A No Mode / <i>Geen Modus</i>	2A correct solution (2)	D L1
* 1.3.3	Number of unemployed people / <i>Aantal werklose mense</i> ✓RT = 35,6% × 918 000 ✓MA = 326 808 ✓CA	1RT correct % 1MA calculating percentage 1CA simplification (3)	D L1
		[31]	

QUESTION/VRAAG 2 [33 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
* 2.1.1	125 Bossie Street, Uppington ✓✓RT	2RT correct address (2)	F L1
2.1.2	<p>Excluding VAT / <i>BTW uitgesluit</i></p> <p>✓RT $= R900 \times \frac{100}{115}$ ✓MA $= R782,6086957$ $= R782,61$ ✓A</p> <p style="text-align: center;">OR/OF</p> <p>✓RT $= \frac{R900}{1,15}$ ✓MA $= R782,6086957$ $= R782,61$ ✓A</p> <p style="text-align: center;">OR/OF</p> <p>VAT / <i>BTW</i> ✓RT $= R900 \times (15 \div 115)$ $= R117,39$ ✓A</p> <p>Excluding VAT / <i>BTW uitgesluit</i></p> <p>$= R900 - R117,39$ $= R782,61$ ✓A</p>	<p>1RT correct accommodation 1MA excluding calculation</p> <p>1A simplification</p> <p style="text-align: center;">OR / OF</p> <p>1RT correct accommodation 1MA excluding calculation</p> <p>1A simplification</p> <p style="text-align: center;">OR / OF</p> <p>1RT correct accommodation 1A vat amount</p> <p>1A simplification (3)</p>	F L2
2.1.3	<p style="text-align: right;">✓MA</p> <p>C = R75 040,00 – (R28 800+ R5 760 + R6 480) = R34 000 ✓CA</p> <p style="text-align: center;">OR / OF</p> <p>C = R850 × 2 × 20 ✓MA = R34 000 ✓CA</p>	<p>1MA correct values used 1CA simplification</p> <p style="text-align: center;">OR / OF</p> <p>1MA multiply correct values 1CA simplification (2)</p>	F L1

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
* 2.1.4	<p>Number of guests in 4-bed rooms / <i>Aantal gaste in 'n 4-bed-kamers</i></p> <p>$= R34\ 000 \div (2 \times 850)$ ✓MCA $= 20$ ✓CA</p> <p>Number of guests in 2-bed rooms <i>Aantal gaste in 'n 2-bed-kamers</i></p> <p>$= R28\ 800 \div (2 \times 900)$ ✓MCA $= 16$ ✓CA</p> <p>Ratio/<i>Verhouding</i> $= 16 : 20$ ✓MCA $= 4 : 5$ ✓CA</p> <p style="text-align: center;">OR / OF</p> <p>Number of guests in 2-bed rooms <i>Aantal gaste in 'n 2-bed-kamers</i></p> <p>$= R28\ 800 \div (2 \times 900)$ ✓MA $= 16$ ✓CA</p> <p>Number of guest in 4-bed rooms <i>Aantal gaste in 'n 4-bed-kamers</i> ✓MCA $= 36 - 16 = 20$ ✓CA</p> <p>Ratio/<i>Verhouding</i> $= 16 : 20$ ✓MCA $= 4 : 5$ ✓CA</p> <p style="text-align: center;">OR / OF</p> <p>✓MA ✓MA $= \frac{R28\ 800}{900} : \frac{R34\ 000}{850}$ ✓MA</p> <p>Ratio/<i>Verhouding</i> $= 32 : 40$ ✓A ✓MCA $= 4 : 5$ ✓CA</p>	<p>CA from Question 2.1.3</p> <p>1MCA dividing and multiplying 1CA simplification</p> <p>1MCA dividing and multiplying 1CA number of guest in 2-bed accommodation</p> <p>1MCA ratio in correct order 1CA simplification</p> <p style="text-align: center;">OR / OF</p> <p>1MA dividing and multiplying 1CA simplification</p> <p>1MCA subtracting 1CA number of guest in 2-bed accommodation 1MCA ratio in correct order 1CA simplification</p> <p style="text-align: center;">OR / OF</p> <p>1MA left ratio 1MA right ratio 1MA concept of ratio 1A correct value 1MCA ratio in correct order 1CA simplification</p> <p style="text-align: right;">(6)</p>	F L3

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.1.5	<p>Cost of one guest in 2-bed room/ <i>Koste van een gas in 'n 2-bed-kamer</i> $= 2 \times R900$ $= R1\ 800 \quad \checkmark A$</p> <p>Refund for cancelling before check-in time/ <i>Terugbetaling vir kanselasie voor inteken tyd</i></p> <p>$= \frac{75}{100} \times R1\ 800 \quad \checkmark MCA$ $= R1\ 350 \quad \checkmark CA$</p> <p>Refund for cancelling after check-in time/ <i>Terugbetaling vir kanselasie na inteken tyd</i> $\frac{25}{100} \times R1\ 800$ $= R450 \quad \checkmark CA$</p> <p>Refund for meals/<i>Terugbetaling vir etes</i> $= 4 \times R80 + 4 \times R90$ $= R680 \quad \checkmark A$</p> <p>Total Refund/ <i>Totale Terugbetaling</i> $= R450 + R1\ 350 + R680$ $= R2\ 480 \quad \checkmark CA$</p> <p>Statement is CORRECT/<i>Stelling is KORREK</i> $\checkmark O$</p> <p style="text-align: center;">OR / OF</p>	<p>1A total accommodation</p> <p>1MCA calculating 75%</p> <p>1CA simplification</p> <p>1CA second accommodation refund</p> <p>1A meal refund</p> <p>1CA total refund</p> <p>1O conclusion</p> <p style="text-align: center;">OR / OF</p>	<p>F L4</p>

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.1.5	<p>First Person / <i>Eerste persoon</i> Total cost of room / <i>Totale koste van kamer</i> $= 2 \times R900$ $= R1\ 800$ ✓A</p> <p>Refund for accommodation / <i>Terugbetaling van akkomodasie</i> $= R1\ 800 \times 25\%$ $= R450$ ✓MCA</p> <p>Total refund / <i>Totale terugbetaling</i> $= R450 + 2 (R80,00 + R90)$ $= R790$ ✓CA</p> <p>Second Person / <i>Tweede Persoon</i> Total cost of room / <i>Totale koste van kamer</i> $= 2 \times R900$ $= R1\ 800$</p> <p>Refund for accommodation / <i>Terugbetaling vir akkomodasie</i> $= R1\ 800 \times 75\%$ $= R1\ 350$</p> <p>Total refund / <i>Totale terugbetaling</i> $= R1\ 350 + 2 (R80,00 + R90)$ ✓A $= R1\ 690$ ✓CA</p> <p>Total refund for both people / <i>Totale terugbetaling vir beide persone</i> $= R1\ 690 + R790 = R2\ 480$ ✓CA</p> <p>Statement is CORRECT / <i>Stelling is KORREK.</i> ✓O</p>	<p>1A total accommodation</p> <p>1MCA calculating 25%</p> <p>1CA simplification</p> <p>1A total meals 1CA total refund</p> <p>1CA total refund for 2 people</p> <p>1O conclusion</p>	(7)
* 2.2.1	<p>Cost to fix the vehicle / <i>Koste om voertuig reg te maak</i></p> <p>$= R50\ 000 + R22\ 000 + R3\ 682,50 + R450$ ✓MA $= R76\ 132,50$ ✓CA</p>	<p>1MA adding all values 1CA correct answer AO</p>	(2) F L1

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.2.2	<p>Selling price / <i>verkoopprys</i></p> $= \frac{65}{100} \times R145\,900 \checkmark \text{MA}$ $= R94\,835 \checkmark \text{A}$ $= R94\,835 - R76\,132,50 \checkmark \text{MCA}$ $= R18\,702,50 \checkmark \text{CA}$ <p>Not VALID / <i>Nie GELDIG nie</i> $\checkmark \text{O}$</p>	<p>CA from Question 2.2.1</p> <p>1MA percentage calculation</p> <p>1A correct answer</p> <p>1MCA subtracting values</p> <p>1CA simplification</p> <p>1O conclusion</p> <p style="text-align: right;">(5)</p>	F L4
2.2.3	<p>Interest / <i>rente</i></p> $= R15\,000 \times 6,25\%$ $= R937,50 \checkmark \text{A}$ <p>Amount after one year / <i>bedrag na een jaar</i></p> $= R15\,000 + R937,50 \checkmark \text{MA}$ $= R15\,937,50 \checkmark \text{CA}$ <p>Interest for second year/ <i>rente vir tweede jaar</i></p> $= R15\,937,50 \times 6,95\%$ $= R1\,107,66 \checkmark \text{CA}$ <p>Amount after two years / <i>bedrag na twee jaar</i></p> $= R15\,937,50 + R1\,107,66$ $= R17\,045,16$ <p>Interest after two years / <i>rente na twee jaar</i></p> $= R17\,045,16 - R15\,000 \checkmark \text{MCA}$ $= R2\,045,16 \checkmark \text{CA}$ <p style="text-align: center;">OR / OF</p> <p>Interest / <i>rente</i></p> $= R15\,000 \times 6,25\% = R937,50 \checkmark \text{A}$ <p>Amount after one year / <i>bedrag na een jaar</i></p> $= R15\,000 + R937,50 \checkmark \text{MA}$ $= R15\,937,50 \checkmark \text{CA}$ <p>Interest for second year / <i>rente vir tweede jaar</i></p> $= R15\,937,50 \times 6,95\%$ $= R1\,107,66 \checkmark \text{CA}$ <p>Interest after two years / <i>rente na twee jaar</i></p> $= R937,50 + R1\,107,66 \checkmark \text{MCA}$ $= R2\,045,16 \checkmark \text{CA}$ <p style="text-align: center;">OR / OF</p>	<p>1A interest</p> <p>1MA adding interest</p> <p>1CA Simplification</p> <p>1CA simplification</p> <p>1MCA subtracting values</p> <p>1CA simplification</p> <p style="text-align: center;">OR / OF</p> <p>1A interest</p> <p>1MA adding interest</p> <p>1CA Simplification</p> <p>1CA simplification</p> <p>1MCA adding values</p> <p>1CA simplification</p> <p style="text-align: center;">OR / OF</p>	F L3

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.2.3	<p>Amount after two years / <i>bedrag na twee jaar</i></p> <p style="text-align: center;">✓MA ✓MA</p> $= R15\,000 \times 1,0625 \times 1,0695 \quad \checkmark\text{MA}$ $= R17\,045,16 \quad \checkmark\text{CA}$ <p>Interest after two years / <i>rente na twee jaar</i></p> $= R17\,045,16 - R15\,000 \quad \checkmark\text{MCA}$ $= R2\,045,16 \quad \checkmark\text{CA}$	<p>1MA adding percentage year 1 1MA adding percentage year 2 1MA multiplying year 1 & 2 1CA simplification</p> <p>1MCA subtracting values 1CA simplification</p> <p style="text-align: right;">(6)</p>	
		[33]	

QUESTION/VRAAG 3 [25 MARKS/PUNTE]			
Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
3.1.1	537 ✓✓RT	2RT correct value (2)	D L1
* 3.1.2	✓RT Difference/Verskil = 2 163 – 2 828 = – 665 ✓CA	1RT correct values chosen 1CA simplification (2)	D L1
3.1.3	% employees with disabilities / werkers met gestremdhede ✓RT $= \frac{34}{2\,163} \times 100\%$ ✓MCA = 1,572% ✓CA	CA from Question 3.1.2 1RT correct values chosen 1MCA calculate % 1CA simplification <div style="border: 1px solid black; padding: 2px;">Accept: 1,6% and 1,57%</div> (3)	D L2
3.1.4	% employees at head-office/ % werkers by hoofkantoor = 1,5% × 2 163 = 32,445 ✓A Number of employees in motor dealerships <i>Aantal werkers in motorhandelaar</i> = 2 163 – 32,445 ✓MCA = 2 130,555 ✓CA Average per dealership/gemiddelde per motorhandelaar = 2 130,555 ÷ 41 ✓MCA = 51,9647... ✓CA OR / OF % employees at head-office/ % werkers by hoofkantoor = 100% – 1,5% = 98,5% ✓A	CA from Question 3.1.2 1A employees at head office 1MCA subtracting 1CA employees at branches 1MCA average concept 1CA simplification OR / OF 1A employees at head office	D L3

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
3.1.4	<p>Number of employees in motor dealerships <i>Aantal werkers in motorhandelaar</i></p> <p>$= 98,5\% \times 2\,163$ ✓MCA $= 2\,130,555$ ✓CA</p> <p>Average per dealership/<i>gemiddelde per motorhandelaar</i> $= 2\,130,555 \div 41$ ✓MCA $= 51,9647$ ✓CA</p>	<p>1MCA multiplying 1CA employees at branches</p> <p>1MCA average concept 1CA simplification NPR</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Accept: 51,96 / 51,97 / 52 / 51</div> <p style="text-align: right;">(5)</p>	
3.1.5	<p>% coloured females / % <i>bruin vroue</i> ✓RT</p> <p>$= \frac{54}{2\,163} \times 100\%$ ✓MA</p> <p>$= 2,497\%$ ✓R</p>	<p>CA from Question 3.1.2</p> <p>1RT correct values</p> <p>1MA probability concept</p> <p>1R rounded answer</p> <p style="text-align: right;">(3)</p>	P L2
3.2.1 (a)	<p>Lower Quartile / <i>Onderste kwartiel</i> = 21 ✓✓RT</p>	<p>2RT finding correct value</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Accept: above 20 – less than 22</div> <p style="text-align: right;">(2)</p>	D L2
3.2.1 (b)	<p>75th percentile / <i>75ste persentiel</i> = 28,2 ✓✓RT</p>	<p>2RT finding correct value</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Accept: above 28 – 29</div> <p style="text-align: right;">(2)</p>	D L2
3.2.1 (c)	<p>Median / <i>Mediaan</i> = 31,5 ✓✓RT</p>	<p>2RT finding correct value</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Accept: 30,5 – 32,5</div> <p style="text-align: right;">(2)</p>	D L2

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
3.2.2	<p>50% of all the provinces had an unemployment rate of higher than 31,75% / ✓✓O <i>50% van al die provinsies het 'n werkloosheidkoers van hoër as 31,75%</i></p> <p>OR / OF</p> <p>The median of the data is the highest in 2021. ✓✓O <i>Die mediaan van die data is die hoogste in 2021.</i></p> <p>OR / OF</p> <p>The maximum value is the highest in 2021. ✓✓O <i>Die maksimum waarde is die hoogste in 2021.</i></p> <p>OR / OF</p> <p>The box and whisker indicates a higher unemployment rate / <i>Die mond-en-snordiagram dui 'n hoër werkloosheidskoers aan.</i> ✓✓O</p> <p>OR / OF</p> <p>Q3 is higher in 2021 than in 2020 and 2019. ✓✓O <i>K3 is hoër in 2021 as in 2020 en 2019.</i></p> <p>(Any two reasons / <i>Enige 2 redes</i>)</p>	<p>20 first explanation</p> <p>20 second explanation</p> <p>(4)</p>	D L4
		[25]	

QUESTION/VRAAG 4 [29 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.1.1	<p>Banks are discouraging clients to go to the branch to reduce the number of people visiting the bank / <i>Banke ontmoeding kliente om binne die bank transakies te doen om die aantal mense binne die bank te verminder.</i> ✓✓A</p> <p style="text-align: center;">OR / OF</p> <p>Banks have to pay employees working in the bank / <i>Banke moet werkers betaal om in die bank te werk.</i> ✓✓A</p> <p style="text-align: center;">OR / OF</p> <p>To reduce the wage bill / <i>Om die loonrekening te verminder.</i> ✓✓A</p>	<p>2A explanation</p> <p>(2)</p>	F L4
4.1.2	<p>Difference in cost / <i>Verskil in koste</i></p> <p>= R5,00 – R1,50 ✓RT = R3,50 ✓A</p>	<p>1RT correct values 1A simplification</p> <p>(2)</p>	F L2
4.1.3	<p>Nedbank: Pay-as-you-use / <i>Betaal-soos-jy-gebruik</i></p> <p>Transaction cost / <i>Transaksiekoste</i> ✓A ✓A ✓SF ✓A = $2 \times R5,00 + 2 \times R9,00 + R11 + 5 \times R2,30 + R15$ = R65,50 ✓CA</p> <p>Difference / <i>Verskil</i> = R65,50 – R45,00 = R20,50 ✓CA</p> <p>His statement is VALID / <i>Sy bewering is GELDIG.</i> ✓O</p>	<p>1A debit order fees 1A cash withdrawal own ATM 1SF correct formula 1A cash send cost</p> <p>1CA simplification</p> <p>1CA subtracting</p> <p>1O valid</p> <p>(7)</p>	F L4

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
* 4.2.1	<p>Annual tax payable before primary rebate/ <i>Jaarlikse belasting betaalbaar voor primêre korting</i> $= R87\,329 \times 18\%$ ✓MA $= R15\,719,22$ ✓CA</p> <p>Annual tax payable after primary rebate/ <i>Jaarlikse belasting betaalbaar na primêre korting</i> $= R15\,719,22 - R15\,714$ ✓MCA $= R5,22$ ✓CA</p>	<p>1MA correct tax bracket 1CA simplification</p> <p>1MCA subtracting primary rebate 1CA simplification</p> <p>(4)</p>	F L3
4.2.2	<p>The discount SARS gives to tax payers / <i>Die korting wat SARS vir belasting betalers gee.</i></p> <p style="text-align: center;">OR / OF</p> <p style="text-align: right;">✓✓O</p> <p>Rebate is a tax relief given to tax payers / <i>Korting is die belasting verligting wat aan belasting betalers gegee word.</i></p>	<p>2O tax discount</p> <p>(2)</p>	F L1
4.2.3	<p>✓RT ✓RT $R15\,714 + R8\,613$ ✓MA $= R24\,327$ ✓MCA $R24\,327 \div 18\%$ ✓MCA $= R135\,150$</p> <p style="text-align: center;">OR / OF</p> <p>$= R135\,150 \times 18\%$ ✓MA $= R24\,327$ ✓MCA</p> <p style="text-align: right;">✓RT ✓RT</p> <p>$= R24\,327 - (R15\,714 + R8\,613)$ ✓MA $= R0$</p>	<p>1RT correct value 1RT correct value 1MA adding correct values 1MCA simplification</p> <p>1MCA dividing by 18%</p> <p style="text-align: center;">OR / OF</p> <p>1MA calculating 18% 1MCA simplification 1RT correct value 1RT correct value 1MA subtracting correct values</p> <p>(5)</p>	F L3

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
* 4.3.1	Compound / dual / multiple / stacked bar graph <i>Saamgestelde/dubbel / veelvoudige / gestapelde</i> ✓✓A <i>staafgrafiek</i> OR / OF Line Graph / <i>Lyngrafiek</i> ✓✓A	2A graph (2)	D L1
4.3.2	$D = 100\% - (40\% + 5\% + 30\% + 5\% + 5\%)$ ✓MA $= 15\%$ ✓CA	1MA subtracting from 100% 1CA simplification (2)	D L1
4.3.3	$P_{\text{(not savings)}} = 100\% - 15\%$ ✓RT $= 85\%$ ✓CA $= 0,85$ ✓C OR / OF $P_{\text{(not savings)}} = 30\% + 15\% + 10\% + 10\% + 20\%$ ✓RT $= 85\%$ ✓CA $= 0,85$ ✓C	1RT correct percentages 1CA simplification 1C converting to decimal OR / OF 1RT correct percentages 1CA simplification 1C converting to decimal (3)	P L2
		[29]	

QUESTION/VRAAG 5 [32 MARKS/PUNTE]			
Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
5.1.1	Cottonseed / <i>Katoensaad</i> ✓✓RT	2RT reading from graph (2)	D L2
5.1.2	Coffee contribution / <i>koffie bydrae</i> ✓RT $= \frac{8,92}{100} \times \$110\,322 \text{ million / miljoen}$ ✓MA $= \$9\,840,7224 \text{ million / miljoen / } \$9\,840\,722\,400$ ✓CA	1RT reading from graph 1MA multiplying with total amount 1CA simplification (3)	F L2
5.1.3	0 OR 0% OR Impossible / <i>Onmoontlik</i> ✓✓A	2A correct probability (2)	P L2
* 5.1.4	✓RT $25,98\% = 32\,201 \text{ billion / miljard}$ Total amount / <i>totale bedrag</i> $= \frac{100}{25,98} \times \$32\,201 \text{ billion / miljard}$ ✓MA $= \$123\,945 \text{ billion / miljard}$ ✓CA Amount for corn ✓RT $= \frac{11,91}{100} \times \$123\,945 \text{ billion / miljard}$ $= \$14\,761,890300 \text{ billion / miljard}$ ✓CA OR / OF ✓RT $25,98\% = \$32\,201 \text{ billion / miljard}$ ✓MA ✓RT $11,91\% = ?$ $25,98\% \times ? = \$383\,513,91 \text{ billion / miljard}$ ✓MA $? = \$14\,761,89 \text{ billion / miljard}$ Amount for corn $= \$14\,761,89 \text{ billion / miljard}$ ✓CA OR / OF	1RT correct percentage 1MA working with correct % 1CA simplification 1RT correct % 1CA simplification OR / OF 1RT correct percentage 1MA concept of ratio 1RT correct percentage 1MA calculating total amount 1CA simplification OR / OF	F L2

Q/V	Solution/Opplossing	Explanation/Verduideliking	T&L
5.1.4	<p>✓RT 25,98% = 32 201 billion / miljard</p> <p>Total amount / totale bedrag</p> <p>✓RT ✓MCA $11,91\% = \frac{11,91}{25,98} \times \\$32\,201 \text{ billion / miljard}$ ✓MA = \$14 761,890300 billion / miljard ✓CA</p>	<p>1RT correct percentage</p> <p>1RT correct percentage 1MCA correct ratio 1MA calculating total amount</p> <p>1CA simplification (5)</p>	
5.1.5	<p>% contribution of bananas / % bydrae van piesangs</p> $11,15 = \frac{25,98+16,60+11,91+9,33+6,22+B+3,95}{7} \quad \checkmark \text{MA}$ <p>✓MA $11,15 = \frac{73,99+B}{7}$</p> <p>78,05 = 73,99 + B ✓S B = 78,05 – 73,99 ✓MCA</p> <p>B = 4,06 ✓CA</p> <p style="text-align: center;">OR / OF</p> <p style="text-align: right;">✓MA</p> $25,98 + 16,60 + 11,91 + 9,33 + 6,22 + B + 3,95 = 11,15 \times 7$ <p>✓MA 73,99 + B = 78,05 ✓S</p> <p style="text-align: center;">B = 78,05 – 73,99 ✓MCA</p> <p style="text-align: center;">B = 4,06 ✓CA</p>	<p>1MA concept of mean</p> <p>1MA adding values – 73,99</p> <p>1S simplification 1MCA changing the subject</p> <p>1CA simplification</p> <p style="text-align: center;">OR / OF</p> <p>1MA concept of mean 1MA adding values – 73,99 1S simplification</p> <p>1MCA changing the subject</p> <p>1CA simplification (5)</p>	D L3
5.1.6	118 405 000 000 US\$/VS\$. ✓✓A	2A correct number (2)	D L1
5.2.1	Japan ✓✓RT	2RT correct country (2)	F L2
* 5.2.2	ZAR OR/OF South African Rand / Suid Afrikaanse Rand OR/OF Rand ✓✓RT	2RT correct currency (2)	F L2

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
5.2.3	$\text{€ } 1 = \text{BRL } 5,2379 \checkmark \text{RT}$ $= 5,2379 \times \text{R}3,2026 \checkmark \text{MCA}$ $= \text{R}16,77489 / \text{R}16,7749 / \text{R}16,77 / \text{R}16,775 \checkmark \text{CA}$	1RT correct rate 1MCA multiplying correct values 1CA simplification NPR (<i>min 2 decimal places</i>) AO (3)	F L2
5.2.4	Difference / <i>Verskil</i> (in US\$/VS\$) $\checkmark \text{A}$ $= 29,72 \text{ billion/miljard} - 21,62 \text{ billion/miljard}$ $= 8,1 \text{ billion / miljard} \checkmark \text{CA}$ Difference / <i>Verskil</i> (in BRL) $= 8,1 \text{ billion/miljard} \times 4,9642 \checkmark \text{MCA}$ $= 40,21002 \text{ billion / miljard} \checkmark \text{CA}$ Difference / <i>Verskil</i> (in €) $= 40,21002 \div 5,2379$ $= 7,676744497 \text{ billion / miljard}$ $= 7\,676,744497 \text{ million / miljoen} \checkmark \text{CA}$ His statement is VALID / <i>Sy bewering is GELDIG.</i> $\checkmark \text{O}$	1A difference in US\$ 1CA simplification 1MCA multiplying by correct exchange rate 1CA simplification 1CA answer in millions 1O conclusion NPR (6)	F L4
		[32]	
		TOTAL/TOTAAL: 150	