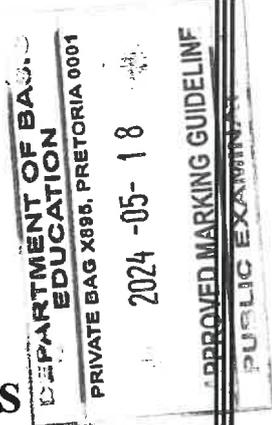




basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA



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

**MATHEMATICAL LITERACY P1/
WISKUNDIGE GELETTERDHEID V1**

MAY/JUNE/MEI/JUNIE 2024

MARKING GUIDELINES/NASIENRIGLYNE

MARKS/PUNTE: 150

Symbol/Kode	Explanation/Verduideliking
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>
NPU	No penalty for omitting correct unit/ <i>Geen penalisasie vir die uitlos van die korrekte eenheid 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 and 2 pages of notes.
Hierdie nasienriglyne bestaan uit 19 bladsye en 2 bladsye met notas.**

APPROVED ON 11 May 2024	External Moderators (Question Paper)		Internal Moderator (Question Paper)	
	R.I. Singh	E.D. Cronje	L.R. de Waal	S.J. Tune

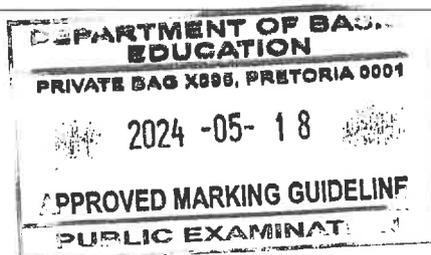
NOTE:

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

LET WEL:

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

QUESTION/VRAAG 1 [32 MARKS/PUNTE] ANSWER ONLY FULL MARKS			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.1.1	Kenya / Kenia ✓✓A	2A correct country (2)	D L1 E
1.1.2	Zambia / Zambië ✓✓A Malawi / Malawi ✓A	2A first correct country 1A second correct country (3)	D L1 E
1.1.3	Malawi / Malawi ✓✓A	2A correct country (2)	D L1 M
*	1.1.4 People for Studying Purposes / Mense vir Studiedoeleindes ✓RT = 83 + 98 + 475 + 83 ✓MA = 739 tourists ✓A	1RT correct values 1MA adding four correct values 1A simplification (3)	D L1 M



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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.2.1	Price of 1 teabag / Prys van 1 teesakkie $= R50,00 \div 40 \checkmark MA$ $= R1,25 \checkmark A$ <p style="text-align: center;">OR / OF</p> $\checkmark A$ $= R1,25 \times 40 \checkmark MA$ $= R50$	1MA R50 divided by 40 1A simplification <p style="text-align: center;">OR / OF</p> 1A R1,25 1MA R1,25 multiplied by 40 (2)	F L1 E
* 1.2.2	$\checkmark RT$ $185 : 100 \checkmark MA$ $37 : 20 \text{ OR / OF } 1 : 0,54 \text{ OR / OF } 1,85 : 1 \checkmark A$	1RT correct values 1MA values in correct order 1A simplification (3)	F L1 M
1.2.3	Total of purchase / Totaal van aankope $\checkmark RT$ $= R185,00 + R100,00 + R16,00 \checkmark MA$ $= R301,00 \checkmark A$	1RT correct values 1MA adding 3 correct values 1A simplification (3)	F L1 E
* 1.3.1	Namibia / Namibië $\checkmark \checkmark A$	2A correct country (2)	F L1 E
* 1.3.2	Zambian Kwacha $\checkmark \checkmark A$ <p style="text-align: center;">OR / OF</p> Zambia / ZMW $\checkmark \checkmark A$	2A correct currency (2)	F L1 E
1.3.3	Malawian Kwacha = $\frac{1 \checkmark MA}{56,211355 \checkmark RT}$ $= 0,017790$ <p style="text-align: center;">OR / OF</p> Malawian Kwacha = $\frac{1 \checkmark MA}{0,017790}$ $= 56,211355 \checkmark RT$	1MA dividing correct values 1RT reading correct value <p style="text-align: center;">OR / OF</p> 1MA dividing correct values 1RT calculating correct value NPR (2)	F L1 E

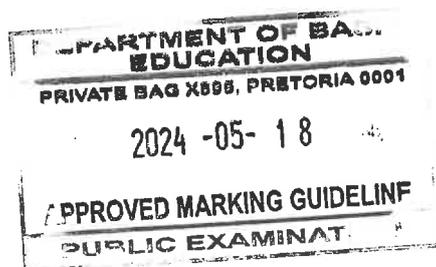
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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.4.1	One million one hundred and five thousand six hundred and eighty five / <i>Een miljoen een honderd en vyf duisend ses honderd vyf en tagtig.</i> ✓✓A	2A answer in words (2)	D L1 E
1.4.2	$P = 131\ 693 + 254\ 139$ ✓MA $= 385\ 832$ ✓A OR / OF $P = 64\ 943 + 66\ 694 + 56 + 136\ 510 + 114\ 436 + 3\ 193$ ✓MA $= 385\ 832$ ✓A	1MA adding correct values 1A simplification (2)	D L1 E
* 1.4.3	Increase / <i>Verhoging</i> $= 359\ 686 - 131\ 693$ ✓MA $= 227\ 993$ ✓A	1MA subtracting correct values 1A simplification (2)	D L1 E
1.4.4	✓A ✓A February / <i>Februarie</i> 2022 OR / OF Feb '22 OR / OF 02/2022	1A correct month 1A correct year (2)	D L1 E
		[32]	



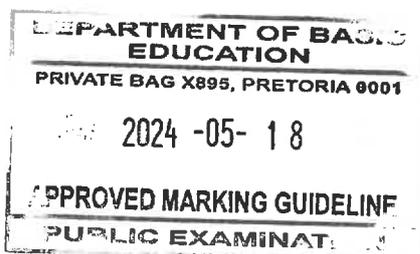
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QUESTION/VRAAG 2 [31 MARKS/PUNTE]		NPU FOR QUESTION 2.2	
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.1.1	R2 000,00 ✓✓A	2A correct amount Accept (– R2 000,00) NPU (2)	F L1 E
* 2.1.2	For security reasons / Vir veiligheidsredes ✓✓A	2A reason (2)	F L4 E
2.1.3	Available money / Geld beskikbaar ✓MA ✓RT $= R20\ 000 - (R5\ 656,22 + R6\ 020,00)$ ✓MA $= R20\ 000 - R11\ 676,22$ $= R8\ 323,78$ OR / OF ✓MA ✓RT $= R20\ 000 - R5\ 656,22 - R6\ 020,00$ ✓MA $= R8\ 323,78$ OR / OF ✓MA ✓RT $= R5\ 656,22 + R6\ 020,00 + R8\ 323,78$ $= R20\ 000$ ✓MA	1RT 2 correct values 1MA adding correct values 1MA subtracting from R20 000 OR / OF 1RT 2 correct values 1MA subtracting correct values 1MA subtracting from R20 000 OR / OF 1RT 2 correct values 1MA adding correct values 1MA getting to R20 000 (3)	F L2 M
* 2.1.4	Price per litre / Prys per liter ✓RT $= \frac{R1\ 376,15}{54,1365\ \text{litres}}$ ✓MA $= R25,42$ ✓CA OR / OF ✓MA $= R25,42/\ell \times 54,1365\ \ell$ ✓RT $= R1\ 376,15$ ✓CA	1RT correct rand value 1MA dividing by litres 1CA simplification OR / OF 1RT correct rand value 1MA multiplying 1CA simplification AO (3)	F L2 M

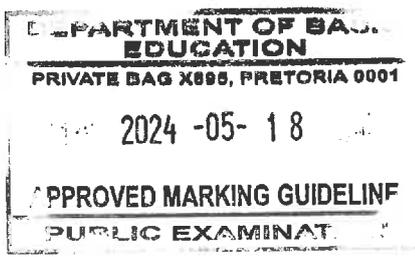


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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.1.5	$100\% - 17,5\% = 82,5\%$ ✓MA Original price / Oorspronklike prys $= \frac{100}{82,5} \times R3\ 299,99$ ✓MA $= R3\ 999,99$ ✓CA <p style="text-align: center;">OR / OF</p> $100\% - 17,5\% = 82,5\% = 0,825$ ✓MA $= \frac{R3\ 299,99}{0,825}$ ✓MA $= R3\ 999,99$ ✓CA	1MA calculate discounted percentage 1RT correct value 1MA percentage calculation 1CA simplification <p style="text-align: center;">OR / OF</p> 1MA calculate discounted percentage 1RT correct value 1MA divide by 0,825 1CA simplification NPR	F L2 D (4)
2.2.1	Bar sales and Functions / Kroegverkope en Funksies ✓✓RT	2RT correct item Accept: Bar sales	F L1 E (2)
2.2.2	Projected amount / Geprojekteerde bedrag $\frac{47}{23\ 500} = \frac{49}{B}$ ✓MA ✓RT $B = 1\ 151\ 500 \div 47$ ✓MA $= 24\ 500$ ✓CA <p style="text-align: center;">OR / OF</p> $\frac{47}{23\ 500} : \frac{49}{B}$ ✓MA ✓RT $B = \frac{23\ 500}{47} \times 49$ ✓MA $= 500 \times 49$ $= R24\ 500$ ✓CA <p style="text-align: center;">OR / OF</p>	1MA concept of ratio 1RT 23 500 1MA divide by 47 1CA simplification <p style="text-align: center;">OR / OF</p> 1MA concept of ratio 1RT 23 500 1MA divide by 47 1CA simplification <p style="text-align: center;">OR / OF</p>	F L2 D



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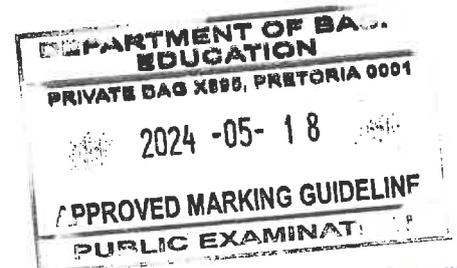
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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.2.2	<p>Total ratio / <i>Totale verhouding</i> = 47 + 49 = 96</p> <p>\checkmarkRT Total Income / <i>Totale Inkomste</i> = 23500 \times $\frac{96}{47}$ \checkmarkMA = 48 000</p> <p>B = 48 000 – 23 500 \checkmarkMA = 24 500 \checkmarkCA</p>	<p>1RT 23 500 1MA concept of ratio</p> <p>1MA subtracting values 1CA simplification</p>	(4)
2.2.3	<p>Difference in income / <i>Verskil in inkomste</i> \checkmarkRT = £(455 869 – 396 453) = £59 416 \checkmarkCA</p> <p>% change / <i>verandering</i> = $\frac{59\,416}{396\,453} \times 100\%$ \checkmarkMA \checkmarkMA = 14,9868... % = 14,99 OR 15% \checkmarkCA</p> <p>OR / OF</p> <p>% change / <i>verandering</i> = $\frac{\text{new price/new prys} - \text{old price/ou prys}}{\text{old price/ou prys}} \times 100\%$ \checkmarkRT = $\frac{455\,869 - 396\,453}{396\,453} \times 100\%$ \checkmarkMA \checkmarkCA = $\frac{59\,416}{396\,453} \times 100$ = 14,9868 ... % = 14,99% OR/OF 15% \checkmarkCA</p> <p>OR / OF</p> <p>Current percentage / <i>Huidige persentasie</i> \checkmarkRT = $\frac{455\,869}{396\,453} \times 100\%$ \checkmarkMA = 114,9937067% \checkmarkA</p> <p>Difference in % income / <i>Verskil in % inkomste</i> = 114,9937067% – 100% \checkmarkMCA = 14,99% OR/OF 15% \checkmarkCA</p>	<p>1RT correct values 1CA difference</p> <p>1MA % calculation 1MA correct denominator 1CA simplification</p> <p>OR / OF</p> <p>1RT correct values 1MA % calculation 1MA correct denominator</p> <p>1CA correct difference 1CA simplification</p> <p>OR / OF</p> <p>1RT correct values 1MA % calculation</p> <p>1A correct percentage</p> <p>1MCA correct difference 1CA simplification</p>	F L3 M

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Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.2.4	<p>Year 1's inflation / Jaar 1 se inflasie:</p> $= \frac{1,82}{100} \times \text{£}257\,460 \quad \checkmark \text{RT}$ $= \text{£}4\,685,772$ <p>After year 1's inflation / Na jaar 1 se inflasie:</p> $= \text{£}257\,460 + \text{£}4\,685,772 \quad \checkmark \text{MCA}$ $= \text{£}262\,145,77 \quad \checkmark \text{CA}$ <p>Year 2's inflation / Jaar 2 se inflasie:</p> $= \frac{2}{100} \times \text{£}262\,145,77$ $= \text{£}5\,242\text{£},9154$ <p>After year 2's inflation / Na jaar 2 se inflasie:</p> $= \text{£}262\,145,77 + \text{£}5\,242\text{£},9154$ $= \text{£}267\,388,69 \quad \checkmark \text{CA}$ <p>Difference / Verskil</p> $= \text{£}284\,000 - \text{£}267\,388,69 \quad \checkmark \text{MCA}$ $= \text{£}16\,611,31$ <p>His statement is VALID / Sy bewering is GELDIG. $\checkmark \text{O}$</p> <p style="text-align: center;">OR / OF</p>	<p>1RT correct value</p> <p>1MCA adding correct values</p> <p>1CA simplification</p> <p>1CA amount year 2</p> <p>1MCA subtracting values</p> <p>1O conclusion</p> <p style="text-align: center;">OR / OF</p>	<p>F L4 D</p>

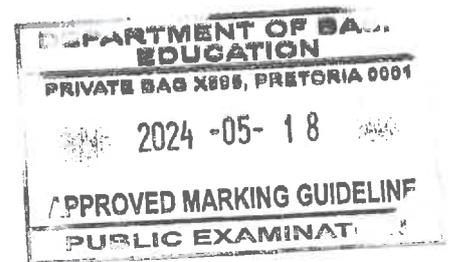


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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.2.4	<p>After year 1's inflation / Na jaar 1 se inflasie:</p> $\frac{\checkmark\text{MA}}{101,82} \times \checkmark\text{RT} \times \text{£}257\,460 = \times 1,0182$ $\frac{101,82}{100} \times \text{£}257\,460$ <p>= £262 145,77 ✓CA</p> <p>After year 2's inflation / Na jaar 2 se inflasie:</p> $\frac{102}{100} \times \text{£}262\,145,77$ <p>= £267 388,69 ✓CA</p> <p>Difference / Verskil</p> $= \text{£}284\,000 - \text{£}267\,388,69 \checkmark\text{MCA}$ $= \text{£}16\,611,31$ <p>His statement is VALID / Sy bewering is GELDIG. ✓O</p>	<p>1RT correct value 1MA percentage increase</p> <p>1CA simplification</p> <p>1CA amount year 2</p> <p>1MCA subtracting values</p> <p>1O conclusion</p>	<p>(6) [31]</p>



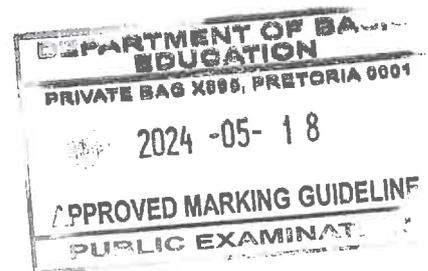
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QUESTION/VRAAG 3 [30 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
3.1.1	29 ✓✓A	2A correct number (2)	D L1 E
3.1.2	30 ✓✓A	2A mode (2)	D L2 E
3.1.3	$D = \frac{3}{5} \times 40 \quad \checkmark\text{MA}$ $= 24 \text{ periods} \quad \checkmark\text{CA}$ <p style="text-align: center;">OR / OF</p> $33 = \frac{3 + D + 26 + 30 + 32 \dots}{29}$ $33 = \frac{933 + D}{29} \quad \checkmark\text{RT}$ $33 \times 29 = 933 + D \quad \checkmark\text{MA}$ $D = 957 - 933$ $D = 24 \quad \checkmark\text{CA}$ <p style="text-align: center;">OR / OF</p> $D = 0,6 \times 40 \quad \checkmark\text{MA}$ $D = 24 \text{ periods} \quad \checkmark\text{CA}$	1RT correct fraction 1MA multiplying with 40 1CA simplification <p style="text-align: center;">OR / OF</p> 1RT correct fraction 1MA changing the subject of the formula 1CA simplification <p style="text-align: center;">OR / OF</p> 1RT correct fraction 1MA multiplying with 40 1CA simplification AO (3)	D L2 M



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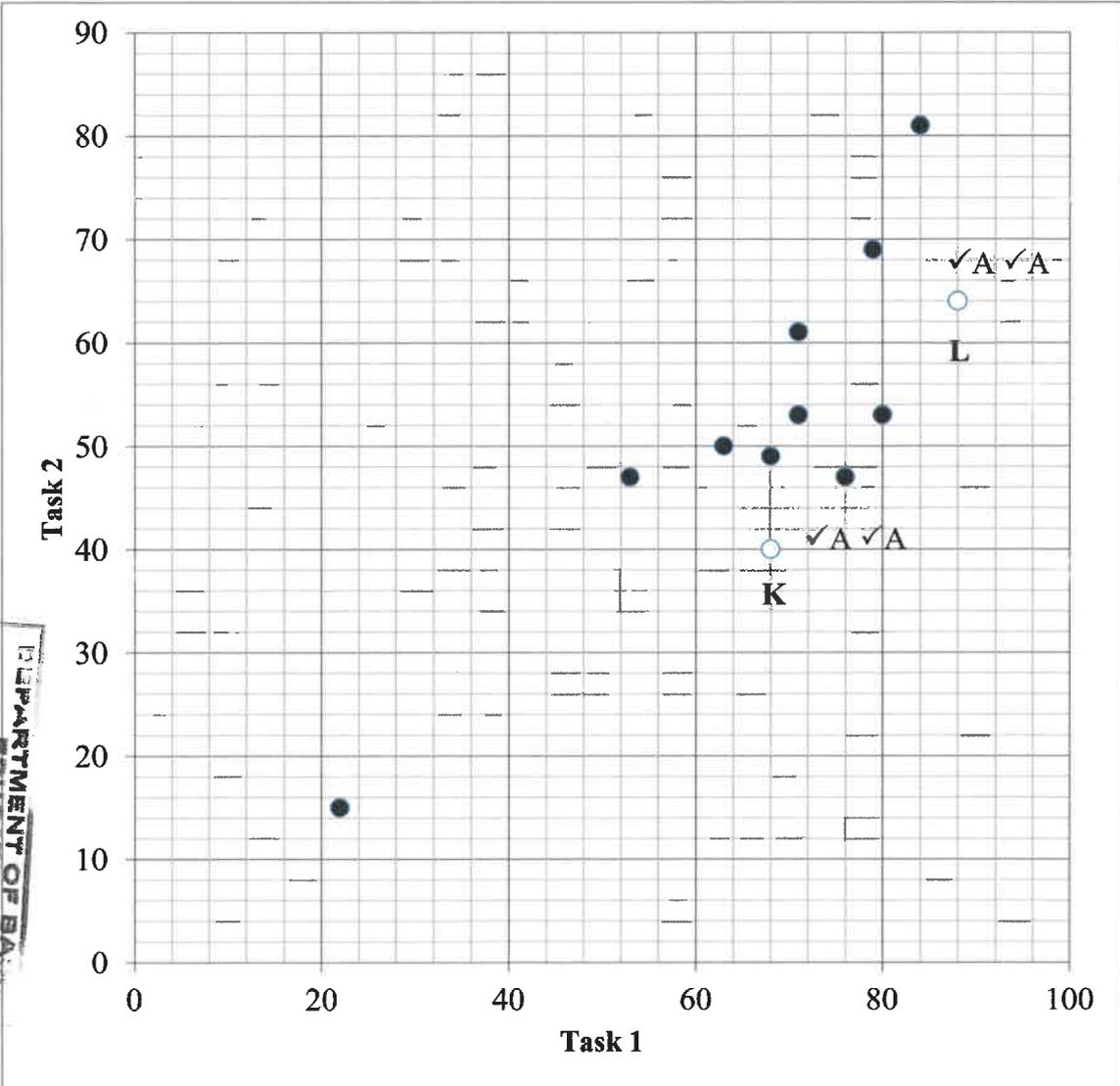
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
3.1.4	<p>Median / Mediaan = 35 ✓✓A</p> <p>The median has half the staff above and half the staff below. ✓O <i>Die mediaan toon die helfte van die personeel bo en helfte van die personeel onder.</i></p> <p style="text-align: center;">OR / OF</p> <p>The outliers affect the calculation of the mean, hence it is not a reliable average. ✓O <i>Die uitskieters affekteer die berekening van die gemiddels, daarom is dit nie 'n betroubare punt nie.</i></p> <p style="text-align: center;">OR / OF</p> <p>More than 58,62% of staff has 35 periods or more. ✓O <i>Meer as 58,62% van die personeel het 35 periodes of meer.</i></p>	<p>2A median</p> <p>1O reason</p>	<p>D L4 E</p>
3.1.5	<p>Probability / Waarskynlikheid</p> $= \frac{16}{21} \checkmark A$ $= \frac{16}{21} \checkmark A$	<p>1A numerator 1A denominator</p>	<p>P L2 E</p>
* 3.2.1 (a)	<p>Scatter plot / Spreidingsdiagram ✓✓A</p>	<p>2A correct graph</p>	<p>D L1 E</p>
3.2.1 (b)	<p>Range / Omvang ✓RT ✓RT = 81 – 15 = 66 ✓CA</p>	<p>1RT highest 1RT lowest 1CA simplification AO</p>	<p>D L2 E</p>
* 3.2.1 (c)	<p>Learner / Leerder H ✓✓A</p> <p>The marks for both Task 1 and Task 2 are <u>much</u> lower compared to the other learners / <i>Beide Taak 1 en Taak 2 se punte is heelwat laer in vergelyking met die ander leerders.</i> ✓✓O <i>The learner failed while all the other learners passed / Die leerder het gedruip terwyl al die ander leerders geslaag het.</i></p>	<p>2A correct learner</p> <p>2O correct reason</p>	<p>D L4 D</p>

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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
3.2.2	$\text{Mean} = \frac{53+69+53+49+50+47+61+15+47+81}{10} \checkmark\text{MA}$ $= \frac{525}{10} \checkmark\text{CA}$ $= 52,5 \checkmark\text{CA}$ <p>Difference / Verskil</p> $= 66,7 - 52,5$ $= 14,2 \checkmark\text{CA}$ <p>VALID / GELDIG $\checkmark\text{O}$</p>	<p>1MA correct concept of mean</p> <p>1CA correct adding of values</p> <p>1CA mean</p> <p>1CA simplification</p> <p>1O conclusion</p>	<p>D</p> <p>L4</p> <p>M</p> <p>(5)</p>
* 3.2.3	 <p>2A first point plotted (68;40)</p> <p>2A second point plotted (88;64)</p>	<p>(4)</p>	<p>D</p> <p>L2</p> <p>M</p> <p>[30]</p>

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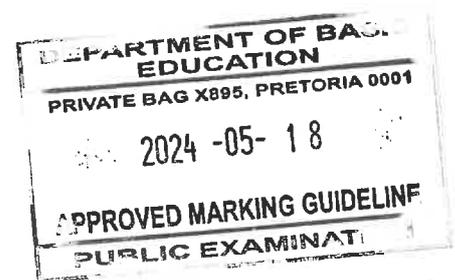

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QUESTION/VRAAG 4 [26 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
* 4.1.1	<p>Total cost before discount / <i>Totale koste voor afslag</i></p> $\begin{aligned} & \checkmark\text{MA} \quad \checkmark\text{MA} \\ & = (R149,95 \times 16,7) + (R99,99 \times 13) \\ & = R2\,504,165 + R1\,299,87 \checkmark\text{MCA} \\ & = R3\,804,04 \checkmark\text{CA} \end{aligned}$ <p>Discount amount / <i>Afslag bedrag</i></p> $\begin{aligned} & = \frac{15}{100} \times R3\,804,04 \checkmark\text{MCA} \\ & = R570,61 \checkmark\text{CA} \end{aligned}$ <p>Total amount / <i>Totale koste</i></p> $\begin{aligned} & = R3\,804,04 - R570,61 \\ & = R3\,233,43 \checkmark\text{CA} \end{aligned}$ <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 100px;"> $= \frac{85}{100} \times R3\,804,04$ </div> <p style="text-align: center;">OR / OF</p> <p>Discounted chops / <i>Afslag tjops</i></p> $\begin{aligned} & \checkmark\text{MA} \quad \checkmark\text{MCA} \\ & = R149,95 \times 16,7 \times \frac{85}{100} = R2\,128,54 \checkmark\text{CA} \end{aligned}$ <p>Discounted boerewors / <i>Afslag boerewors</i></p> $\begin{aligned} & \checkmark\text{MA} \quad \checkmark\text{MCA} \\ & = R99,99 \times 13 \times \frac{85}{100} = R1\,104,89 \checkmark\text{CA} \end{aligned}$ <p>Total amount / <i>Totale bedrag</i></p> $\begin{aligned} & = R2\,128,54 + R1\,104,89 \\ & = R3\,233,43 \checkmark\text{CA} \end{aligned}$ <p style="text-align: center;">OR / OF</p>	<p>1MA multiply correct values 1MA multiply correct values 1MCA adding cost 1CA simplification</p> <p>1MCA calculating 15%</p> <p>1CA simplification</p> <p>1CA simplification</p> <p style="text-align: center;">OR / OF</p> <p>1MA multiply correct values 1MCA calculating 85% 1CA simplification</p> <p>1MA multiply correct values 1MCA calculating 85% 1CA simplification</p> <p>1CA simplification</p> <p style="text-align: center;">OR / OF</p>	<p>F L3 M</p>



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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
* 4.1.1	<p>Total cost before discount / <i>Totale koste voor afslag</i></p> $\begin{aligned} & \checkmark\text{MA} \quad \checkmark\text{MA} \\ & = (\text{R}149,95 \times 16,7) + (\text{R}99,99 \times 13) \\ & = \text{R}2\,504,165 + \text{R}1\,299,87 \checkmark\text{MCA} \\ & = \text{R}3\,804,04 \checkmark\text{CA} \end{aligned}$ <p>Total amount / <i>Totale koste</i></p> $\begin{aligned} & \checkmark\text{MCA} \\ & = \text{R}3\,804,04 - (15\% \times \text{R}3\,804,04) \\ & = \text{R}3\,804,04 - \text{R}570,606 \checkmark\text{MCA} \\ & = \text{R}3\,233,43 \checkmark\text{CA} \end{aligned}$	<p>1MA multiply correct values 1MA multiply correct values 1MCA adding cost 1CA simplification</p> <p>1MCA calculating 15%</p> <p>1MCA subtracting correct values 1CA simplification</p> <p style="text-align: right;">(7)</p>	
4.1.2	<p>Total cost / <i>Totale koste</i></p> $\begin{aligned} & \checkmark\text{MCA} \\ & = \text{R}3\,233,43 + \text{R}850 \checkmark\text{A} \\ & = \text{R}4\,083,43 \end{aligned}$ <p>Cost of 1 plate / <i>Koste vir 1 bord</i></p> $\begin{aligned} & = \text{R}4\,083,43 \div 200 \checkmark\text{MCA} \\ & = \text{R}20,42 \checkmark\text{CA} \end{aligned}$ <p style="text-align: center;">OR / OF</p> <p>Cost of meat for 1 plate / <i>Koste van vleis vir 1 bord</i></p> $\begin{aligned} & \checkmark\text{MCA} \\ & = \frac{\text{R}3\,233,43}{200} \checkmark\text{MCA} \\ & = \text{R}16,16715 \end{aligned}$ <p>Cost of salad, relish etc for 1 plate / <i>Koste van slaai, sous ens vir een bord</i></p> $\begin{aligned} & = \frac{\text{R}850}{200} \\ & = \text{R}4,25 \checkmark\text{A} \end{aligned}$ <p>Total cost / <i>Totale koste</i></p> $\begin{aligned} & = \text{R}16,16715 + \text{R}4,25 \\ & = \text{R}20,42 \checkmark\text{CA} \end{aligned}$	<p>CA from Question 4.1.1</p> <p>1MCA adding value from Q 4.1.1 1A adding R850</p> <p>1MCA correct value ÷ 200 1CA simplification Accept: R20,40</p> <p style="text-align: center;">OR / OF</p> <p>1MCA dividing value from Q 4.1.1 1MCA correct value ÷ 200</p> <p>1A R4,25</p> <p>1CA simplification Accept: R20,40</p> <p style="text-align: right;">(4)</p>	F L2 M

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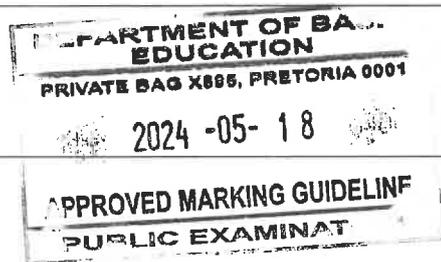
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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.1.3	<p>Profit per plate / Wins per bord</p> $= R35,00 - R20,42 \checkmark MA$ $= R14,58 \checkmark CA$ <p>Number of plates / Getal borde</p> $= R2\ 850,00 \div R14,58 \checkmark MCA$ $= 195,47 \checkmark CA$ <p>Total number of plates / Totale getal borde</p> $= 200 + 195,47$ $= 395,47 \checkmark CA$ $= 400 \checkmark R$ <p style="text-align: center;">OR / OF</p> <p>Profit per plate / Wins per bord</p> $\checkmark MA$ $= \frac{(200 \times R35) - R4083,43}{200}$ $= \frac{R2916,57}{200}$ $= R14,58 \checkmark CA$ <p>Number of plates / Aantal borde</p> $= \frac{R2\ 850}{R14,58} \checkmark MCA$ $= 195,47 \checkmark CA$ <p>Total number of plates / Totale aantal borde</p> $= 200 + 195,47$ $= 395,47 \checkmark CA$ $= 400 \checkmark R$	<p>CA from Question 4.1.2</p> <p>1MA subtracting values 1CA simplification</p> <p>1MCA dividing by profit 1CA simplification</p> <p>1CA total number of plates 1R correct rounding</p> <p style="text-align: center;">OR / OF</p> <p>1MA subtracting values</p> <p>1CA simplification</p> <p>1MCA dividing by profit 1CA simplification</p> <p>1CA total number of plates 1R correct rounding</p> <p style="text-align: right;">(6)</p>	<p>F L3 D</p>
4.2.1	<p>15% $\checkmark\checkmark RT$</p>	<p>2RT correct value</p> <p>Accept: 14,5 – 15,2</p> <p style="text-align: right;">(2)</p>	<p>P L1 E</p>



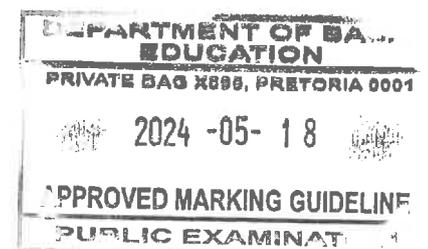
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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
* 4.2.2	Probability / <i>Waarskynlikheid</i> $= \frac{4\ 052\ 572}{43\ 378\ 959}$ $= 0,0934\dots$ $= 0,093 \text{ OR } 9,342\%$	1A numerator 1A denominator 1CA simplification 1R rounding (4)	P L2 M
4.2.3	25 – 34 age group / <i>ouderdomsgroep</i> ✓✓A The largest population is in this group / <i>Die grootste bevolking is in die groep.</i> ✓O	2A correct group 1O reason (3)	D L4 M
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QUESTION/VRAAG 5 [31 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
* 5.1.1	2 / TWO / TWEE ✓✓A	2A number of rebates (2)	F L1 E
5.1.2	<p>Tax before rebates / <i>Belasting voor kortings</i> ✓RT 251 258 + 41% of taxable income above 857 900 ✓SF = R251 258 + 41% (R981 500 – R857 900) = R251 258 + 41% (R123 600) = R251 258 + R50 676 = R301 934 ✓CA</p> <p>Tax after rebates / <i>Belasting na kortings</i> = R301 934 – R17 235 – R9 444 ✓MCA = R275 255 ✓CA</p> <p>Monthly Tax / <i>Maandelikse belasting</i> = $\frac{R275\,255}{12}$ ✓MCA = R22 937,92 ✓CA</p>	<p>CA from Question 5.1.1</p> <p>1RT correct bracket</p> <p>1SF substitute R981 500</p> <p>1CA amount before rebates</p> <p>1MCA subtracting rebates 1CA simplification</p> <p>1MCA dividing by 12</p> <p>1CA simplification (7)</p>	F L3 M
5.2.1	<p>Interest rate is the <u>percentage</u> of the total value you have to pay extra for taking the loan. <i>Rentekoers is die <u>persentasie</u> van die totale waarde wat jy ekstra moet betaal vir die uitneem van die lening.</i></p> <p style="text-align: center;">OR / OF ✓✓A</p> <p>Interest rate is a <u>percentage</u> charged on the loan taken to buy a motor vehicle / <i>Rentekoers is 'n <u>persentasie</u> gehef op die lening uitgeneem om die voertuig te koop.</i></p>	2A correct definition (2)	F L1 E
5.2.2	<p>Difference / <i>Verskil</i> = R6 115,47 – R5 498,19 ✓MA = R617,28 ✓CA</p>	<p>1MA subtracting correct values 1CA simplification AO (2)</p>	F L1 E

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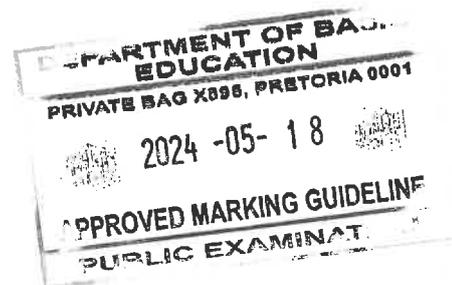
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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
5.2.3	$X = (R6\ 115,47 \times 6 \times 12) - R300\ 000 \checkmark A$ $= R440\ 313,84 - R300\ 000$ $= R140\ 313,84 \checkmark CA$	1SF substitution in bracket 1A subtracting R300 000 1CA simplification AO (3)	F L2 E
* 5.2.4	Balloon payment / <i>Ballonpaaieiment</i> $= 20\% \times R300\ 000$ $= R60\ 000 \checkmark A$ $Y = (R5\ 498,19 \times 72) + R60\ 000 \checkmark MCA$ $= R455\ 869,68 \checkmark CA$	CA from Question 5.2.3 – R334 000 only 1RT correct values 1A simplification 1MA correct value $\times 72$ 1MCA adding balloon payment 1CA simplification (5)	F L3 M
* 5.2.5	The vehicle serves as <u>security</u> for the loan / Die voertuig dien as <u>sekuriteit</u> vir die lening. $\checkmark\checkmark O$	2O reason (2)	F L4 E



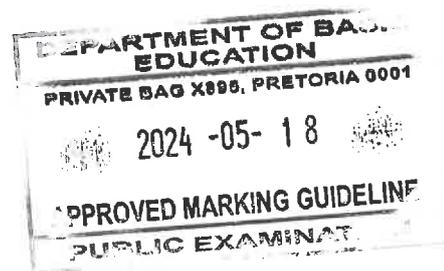
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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
5.3.1	24 ✓✓RT	2RT correct answer NPU (2)	D L2 E
5.3.2	<p>Interquartile Range / <i>Interkwartielomvang</i></p> <p>Electrical / <i>Elektries</i> ✓RT = 29% – 24% ✓MA = 5% ✓CA</p> <p>Plug-in hybrid / <i>Inprophibried</i> = 24% – 6% = 18% ✓CA</p> <p>Quarter of Plug-in / <i>Kwart van 'n inprop</i> = $\frac{1}{4} \times 18\% = 4,5\% \neq 5\%$ ✓CA</p> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin: 10px;"> <p>OR Electric × 4 = 5% × 4 = 20% ≠ 18%</p> </div> <p style="text-align: center;">OR / OF</p> <p>= $\frac{5}{18} = \frac{1}{3,6} \neq \frac{1}{4}$ ✓CA</p> <p style="text-align: center;">OR / OF</p> <p>= $\frac{5}{18} \times 100 = 27,8\%$ ✓CA</p> <p>INVALID / <i>NIE GELDIG NIE</i> ✓O</p>	<p>CA from Question 5.3.1</p> <p>1RT using correct values (28,8 – 29,2) 1MA concept of IQR 1CA simplification(4,8 – 5,2)</p> <p>1CA simplification</p> <p>1CA simplification</p> <p>1O conclusion (6)</p>	D L4 D
		(6)	
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TOTAL/TOTAAL: 150			

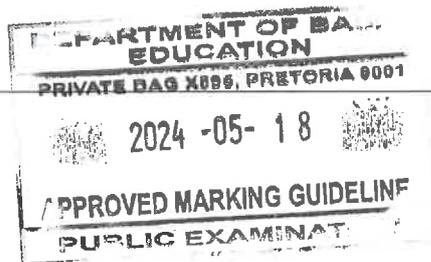


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NOTES:		
QUESTION 1		
1.1.4	1 value (83) omitted = 656	2/3 marks
	Number of people = 264 OR = 641	1/3 marks
1.2.2	$= \frac{185}{100}$ $= \frac{37}{20}$	3/3 marks
	Reverse order 100 : 185 = 20 : 37 OR 1 : 1,85 OR 0,54 : 1	2/3 marks
	Unit still included in the answer	2/3 marks
1.3.1	Namibian Dollar / Namibiëse Dollar	1/2 marks
	Namibian / Namibiëse	2/2 marks
1.3.2	0,971016 / 1,029850	1/2 marks
1.4.3	$= 399\ 936 - 131\ 963$ $= 268\ 243$ $= 359\ 686 - 399\ 936$ $= - 40\ 250$ Increase / <i>Verhoging</i> $= 268\ 243 - 40\ 250 \checkmark \text{MA}$ $= 227\ 993 \checkmark \text{A}$	2/2 marks
	Adding correct values (491 379)	1/2 marks
	Swopped = - 227 993	1/2 marks
QUESTION 2		
2.1.2	So that the account is not hacked. To avoid fraud. For confidentiality. To comply with the POPI act.	2/2 marks
2.1.4	Answer = 25,42ℓ Wrong unit	2/3 marks
QUESTION 3		
3.2.1 (a)	Scattered plot / <i>Verspreidingsdiagram</i> / <i>Spreidings grafiek</i>	2/2 marks
3.2.1 (c)	15 and 22	1/2 marks
3.2.3	$\checkmark \text{A } \checkmark \text{A}$ 68 ; 40 $\checkmark \text{A } \checkmark \text{A}$ 88 ; 64	4/4 marks



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QUESTION 4		
4.1.1	Discounted chops / Afslag tjops $= R127,46 \times 16,7$ $= R2\ 128,58$ Discounted boerewors / Afslag boerewors $= R84,99 \times 13$ $= R1\ 104,87$ Total amount / Totale bedrag $= R2\ 128,58 + R1\ 104,87$ $= R3\ 233,45$	6/7 marks
4.2.2	Invert = 10,704 OR 1070,406% – rounding	1/4 marks
QUESTION 5		
5.1.1	Writing the rebates: 17 235 and 9 444	1/2 marks
	Writing the rebates: primary and secondary	1/2 marks
5.2.4	If you follow the trend: $Y = R156\ 494,00 + R300\ 000$ $= R\ 456\ 494,00$	5/5 marks
5.2.5	The vehicle can be repossessed to cover the debt / motor vehicle is an <u>asset</u> . The risk is higher for the bank with a personal loan. The risk is lower for the bank with a motor vehicle loan.	2/2 marks



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