basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATION/
NATIONAL SENIOR CERTIFICATE EXAMINATION

MATHEMATICAL LITERACY P1/
WISKUNDIGE GELETTERDHEID V1

2019

MARKING GUIDELINE/*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/document/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*
NPU	No penalty for units/*Geen penalisasie vir eenhede nie*
AO	Answer only/*Slegs antwoord*
MCA	Method with constant accuracy/*Metode met volgehoue akkuraatheid*

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.

LET WEL:
- *As 'n kandidaat 'n vraag TWEE KEER beantwoord, merk slegs die EERSTE poging.*
- *As 'n kandidaat 'n antwoord van 'n vraag doodtrek (kanselleer) en nie oordoen nie, merk die doodgetrekte (gekanselleerde) poging.*
- *Volgehoue akkuraatheid (CA) word in ALLE aspekte van die nasienriglyne toegepas, dit hou 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.*

QUESTION/*VRAAG* 1 [32 MARKS/*PUNTE*] ANSWER ONLY FULL MARKS			
Q/*V*	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T&L**
1.1.1	Susan Visser / Susan / Visser ✓✓RT	2RT correct name Accept: **Woolworths** Financial Services (2)	F L1
1.1.2	R548,37 ✓✓RT	2RT correct amount (2)	F L1
1.1.3	12 / twelve/*twaalf* ✓✓A	2A correct number of months (2)	F L1
1.1.4	Debit order is a way for a third party, that you have given permission, to collect money from your bank account. It's typically used to collect monthly subscriptions, insurance premiums or loan repayments/*Debietorder is die manier waarop 'n derde party, wat jy toestemming gee om geld vanaf jou bankrekening te trek. Dit is 'n tipiese manier wat gebruik word om maandelikse versekerings premies of lening betalings te betaal.* ✓A ✓A **OR/*OF*** An instruction to the bank, authorising payment to the other person on a regular basis/*'n Instruksie aan die bank, om die betaling aan 'n ander persoon op 'n gereelde basis te magtig.* ✓A ✓A **OR/*OF***	1A money taken out (deducted) of bank account 1A regular basis/monthly	F L1

Q/*V*	Solution/*Oplossing*	Explanation/*Verduideliking*	T&L
1.1.4	It is an arrangement giving permission to a third party to withdraw money from a bank account on a regular basis/*Dit is 'n reeling, wat toestemming aan 'n derde party gee, om geld op 'n gereelde basis uit 'n bankrekening te onttrek.* ✓A ✓A **OR/*OF*** A term used for bank references in order for them to deduct money owed to certain bank accounts on a regular basis/*'n Term wat gebruik word vir bank verwysings sodat geld op 'n gereelde basis van sekere bankrekkenings afgetrek kan word.* ✓A ✓A **OR/*OF*** When an individual has to pay a certain person on a regular basis, they set a date and how much should be taken from their account/*Wanneer 'n individu gereeld 'n sekere persoon moet betaal, stel hulle 'n datum vas en hoeveel uit hul rekening geneem moet word.* ✓A ✓A **OR/*OF*** Pre-arranged monthly payment of a specific amount from your bank (on behalf of borrower) account to settle debt/*Voorafgestelde maandelikse betaling van 'n spesifieke bedrag van u bank (namens die lener) rekening om skuld te vereffen.* ✓A ✓A	1A money taken out of bank account/salary 1A regular basis/monthly (2)	
1.1.5	26 days/*dae* ✓✓A	2A correct number of days Accept: 25 days (2)	F L1

Q/*V*	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T&L**
1.1.6	✓MA A = R6 859,99 + R144,04 + (– R221,89) =R6 782,14 ✓A **OR/*OF*** ✓MA A = (R6 859,99 + R144,04) – R221,89 = R7 004,03 – R221,89 = R6 782,14 ✓A **OR/*OF*** R38+ R2 559,79 + A + R1 071,70 = R10 451,63 A = R10 451,63 – R3 669,49 ✓MA = R6 782,14 ✓A	1MA adding and subtracting the values 1A simplification **OR/*OF*** 1MA adding and subtracting the values 1A simplification **OR/*OF*** 1MA adding and subtracting the values 1A simplification **NPU** (2)	F L1
1.2.1	26°C ✓✓RT	2RT maximum temperature **NPU** (2)	M L1
1.2.2	8 June/*Junie* 2017 ✓✓RT **OR/OF** 08.06.2017 ✓✓RT **OR/OF** 08 /06 /2017 ✓✓RT **OR/OF** 8 June/Junie ✓✓RT	2RT correct date (2)	M L1
1.2.3	26°C ; 22°C ; 21°C ; 20°C ; 19°C ; 16°C ; 15°C ; 15°C ; 14°C ✓A ✓A	1A correct values 1A correct order **NPU** (2)	D L1

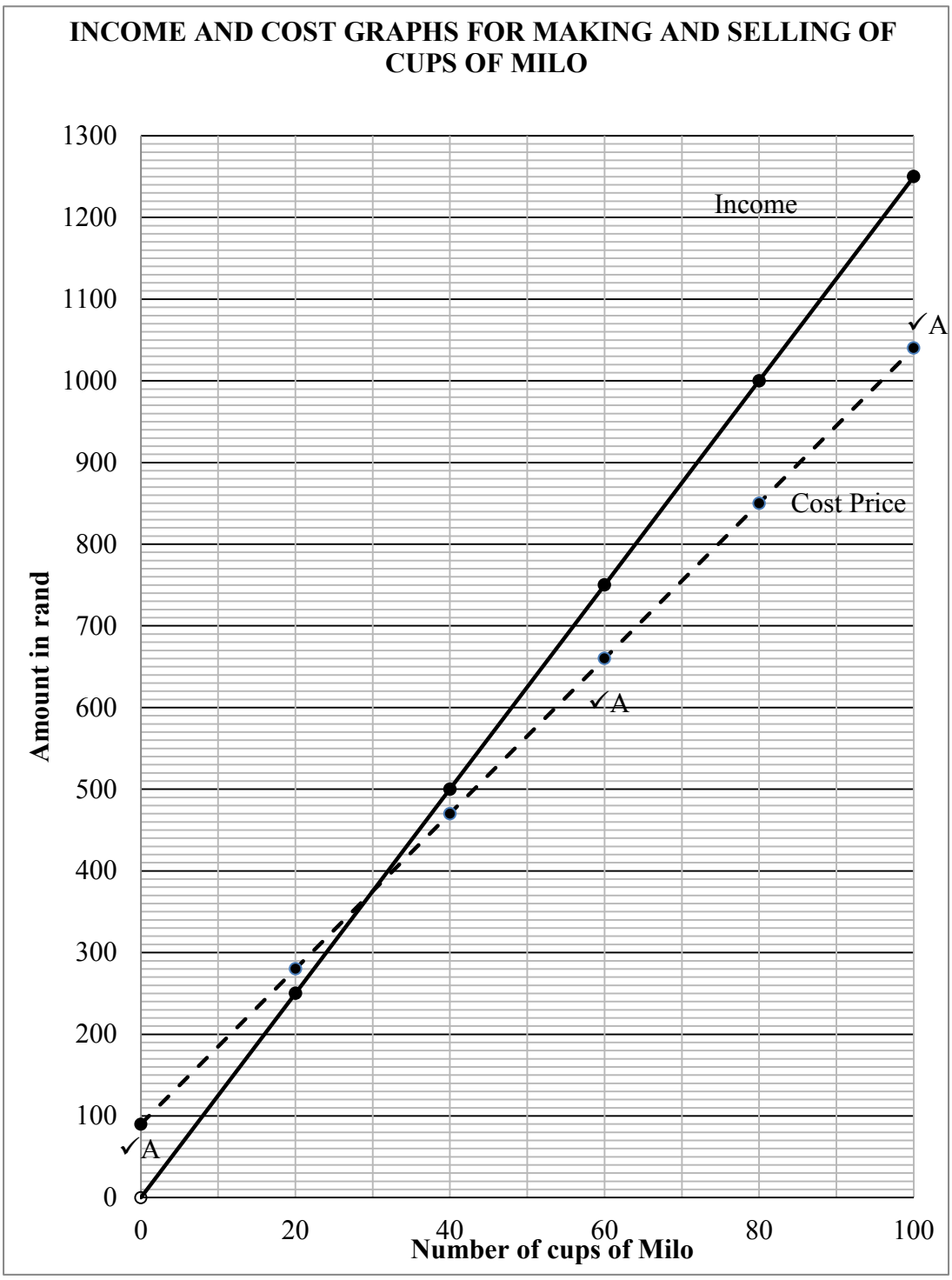
Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
1.2.4	6 June/Junie 2017 ✓✓RT **OR/OF** 06 / 06 / 2017 ✓✓RT **OR/OF** 6 June/*Junie* ✓✓RT **OR/OF** 6th/6de ✓✓RT	2RT correct date (2)	M L1
1.2.5	✓RT 15°C - 3°C = 12°C ✓A	1RT both correct values 1A simplification **NPU** (2)	D L1
1.3.1	Age group/*Ouderdomsgroep*: 20 – 29 ✓✓RT	2RT correct age group (2)	D L1
1.3.2	Number of male voters under 40/ *Aantal manlike kiesers onder 40* = 109 224 + 2 443 115 + 3 095 538 ✓M = 5 647 877 ✓CA **OR/*OF*** Number of male voters under 40/ *Aantal manlike kiesers onder 40* = 11 797 561 – 2 553 636 – 1 824 042 – 1 116 525 – 479 711 – 175 770 ✓M = 5 647 877 ✓CA	1M adding correct values 1CA answer 1M subtracting correct values 1CA answer (2)	D L1
1.3.3	Two million eight hundred and fifty eight thousand nine hundred and ninety six/*Twee miljoen agt honderd agt en vyftig duisend nege honderd ses en negentig.* ✓✓A	2A correct number in words (2)	D L1
1.3.4	Discrete/*Diskreet* ✓✓A	2A discrete (2)	D L1
1.3.5	✓MA 14 442 779 – 11 797 561 = 2 645 218 ✓A	1MA subtracting correct values 1A correct answer (2)	D L1
		[32]	

QUESTION/*VRAAG* 2 [40 MARKS/*PUNTE*]			
Q/*V*	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T&L**
2.1.1	$\frac{\text{R1 140,95}}{12}$ ✓MA = R95,07916667 ✓CA = R95,08 per kg ✓R	1MA both values correct 1CA simplification 1R unit cost **AO** (3)	F L1
2.1.2	R11,99 × 6 ✓MA =R71,94 ✓CA	1MA multiply by 6 1CA total amount **AO** (2)	F L1
2.1.3	Cost price of an item is the cost of making that item/*Kosprys van die item is die koste van die maak van die item.* ✓✓A **OR/*OF*** This is the amount that it costs per unit to either manufacture, purchase the item or to prepare for a service that will be delivered. This amount is pure cost, no markup or profit added yet/*Dit is die bedrag wat dit per eenheid kos om te vervaardig, die item te koop of om voor te berei vir 'n diens wat gelewer sal word. Hierdie bedrag is suiwer koste, geen opmerkings of wins nie.* ✓✓A **OR/*OF*** Money spent when purchasing products/goods for resell/*Geld bestee by die aankoop van produkte/goedere vir herverkoop.* ✓✓A **OR/*OF*** Original price before profit is added/ *Oorspronklike prys voor wins bygevoeg word.* ✓✓A	2A explanation (2)	F L1
2.1.4 (a)	**A** – Cost of milo per cup/*koste van milo per koppie:* R97,95 × 0,04 kg ✓MA = R3,92 ✓CA **OR/*OF*** R97,95 ÷ 25 ✓MA = R3,92 ✓CA	1MA multiply by 0,04 kg 1CA simplification **OR/*OF*** 1MA divide by 25 1CA simplification **AO** (2)	F L1

Q/*V*	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T&L**
2.1.4 (b)	**B** – amount of milk used/*aantal melk gebruik:* $\frac{R1,20}{R11,99}$ ✓MA = 0,1 ℓ ✓A	1MA dividing by R11,99 1A simplification **AO** **NPU** (2)	F L1
2.1.4 (c)	**C** – cost of 25 foam cups/koste van 25 *polistireen koppies:* R1,78 × 25 ✓MA = R44,50 ✓A	1MA multiply by 25 1A simplification **AO** (2)	F L1
2.1.4 (d)	**D** – cost of one cup of milo/*koste van een koppie milo:* ✓M ✓A R3,92 + R1,20 + R0,13 + R1,78 + R0,26 = R7,29	**CA from Question 2.1.4(a)** 1M adding 1A 5 correct values (2)	F L1

Q/*V*	Solution/*Oplossing*	Explanation/*Verduideliking*	T&L
2.1.5	Profit/*Wins* = R7,29 × $\frac{25}{100}$ ✓M Selling price/*Verkoopprys* = R1,8225 + R7,29 ✓M Selling price/*Verkoopprys* = R9,1125 ✓CA = R9,11 **OR/*OF*** R9,10 ✓R **OR/*OF*** Selling price/*Verkoopprys* = R7,29 × $\frac{125}{100}$ ✓M ✓A = R9,1125 ✓CA = R9,11 **OR/*OF*** R9,10 ✓R **OR/*OF*** Profit margin/Winsgrens = $\frac{\text{profit/wins}}{\text{selling price / verkoopsprys}} \times 100\%$ $\frac{x-7,29}{x} \times \frac{100\%}{1} = 25\%$ ✓M $\frac{100\%x-7,29}{x} = \frac{25\%}{1}$ ✓M 100%*x* – 7,29 = 25%*x* 100% - 25%x = 7,29 75%*x* = 7,29 ✓M =R9,72 ✓CA **OR/*OF*** $25\% = \frac{\text{SP/VP} - \text{CP/KP}}{\text{cost price/kosprys}} \times 100\%$ $25\% = \frac{\text{SP/VP} - 7,29}{7,29} \times 100\%$ ✓M ✓M Selling Price/*Verkoopprys* = (0,25 × 7,29) + 7,29 = R9,1125 ✓CA = R9,11 ✓R	**CA from question 2.1.4(d)** 1M 25% of R7,29 only 1M adding 1CA simplification 1R rounding **OR/*OF*** 1A 125% of R7,29 only 1M multiply 1CA simplification 1R rounding **OR/*OF*** 1M creating formula 1M changing the subject of the formula 1M dividing by 75% 1CA simplification **OR/*OF*** 1M 25% of R7,29 only 1M adding 1CA simplification 1R rounding Accept R9,15 and R9,20 (4)	F L2

Q/*V*	Solution/*Oplossing*	Explanation/*Verduideliking*	T&L
2.2.1 (a)	**P** = 40 × R12,50 ✓MA = R500,00 ✓CA **OR/*OF*** 80 cups/*koppies* = R1 000 $\frac{1}{2}$ of 80 cups/*koppies* is 40 cups/*koppies* ∴ $\frac{1}{2}$ of R1 000 is R500. ✓MA ∴ P = R500 ✓CA **OR/*OF*** P = R375 + R125 ✓MA = R500 ✓CA	1MA multiply by R12,50 1CA selling price **OR/*OF*** 1MA trial and error method 1CA selling price 1MA adding 1CA selling price **AO** (2)	F L1
2.2.1 (b)	Income in rand/*Inkomste in rand* = R12,50 × number of cups of milo/*aantal koppies milo* / ***n*** ✓✓A **OR/*OF*** Income in rand/*Inkomste in rand* = R12,50 × ***x*** ✓A ***x*** = number of cups of milo/*aantal koppies milo* ✓A	2A formula **OR/*OF*** 1A Income in rand = R12,50 × ***x*** (in equation) 1A explaining variable (2)	F L2
2.2.1 (c)	Number of cups of milo/*aantal koppies milo* / ***n*** ✓✓RT	2RT independent variable (2)	F L1
2.2.2	R612,50 = R90,00 + (R9,50 × ***n***) R612,50 − R90,00 = R9,50 × ***n*** ✓M $n = \frac{522,50}{9,50}$ ✓S **Q** = 55 ✓CA **OR/*OF*** ✓M R90 + R 9,50 × 55 = R 612,50 ✓S **Q** = 55 ✓CA	1M changing subject of formula 1S simplification 1CA simplification **OR/*OF*** 1M trial and error 1S simplification 1CA simplification **AO** (3)	F L2

Q/*V*	Solution/*Oplossing*	T&L
2.2.3	 1A start of graph – cost price (0;90) 1A end of graph – cost price (100;1 040) 1A joining the points in a straight line graph (3)	F L2

Q/*V*	Solution/*Oplossing*	Explanation/*Verduideliking*	T&L
2.2.4 (a)	The **cost price** for the number of cups of Milo sold and the **selling price** of that number is the same (equal). No profit or loss/*Die **kosprys** vir die getal koppies Milo wat verkoop is en die **verkoopprys** vir daardie getal is dieselfde (gelyk). Geen wins of verlies.* ✓✓A **OR/OF** Cost price = Selling price/ *Kosprys = Verkoopprys* ✓✓A **OR/*OF*** Income = Expenses/*Inkomste = Uitgawes* ✓✓A **OR/*OF*** The profit and loss are equal to 0/*Die wins en verlies is gelyk aan 0.* ✓✓A	2A break-even (2)	F L1
2.2.4 (b)	30 cups/*koppies* ✓✓RT	**CA from Question 2.2.3 (graph)** 2RT number of cups (2)	F L2
2.3.1	✓M 1 200 ÷ 0,10976 ✓RT = 10 932,94 Yen ✓A	1RT correct values 1M dividing by exchange rate 1A simplification **AO** **NPR** (3)	F L2
2.3.2	Yen is Weaker ✓✓A **OR/*OF*** Rand is stronger ✓✓A	**CA from Question 2.3.1** 2A for stating weaker **OR/*OF*** 2A for stating stronger (2)	F L1
		[40]	

QUESTION/*VRAAG* 3 [26 MARKS/*PUNTE*]			
Q/*V*	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T&L**
3.1.1(a)	Area of a face without a circular hole/ *Oppervlakte van 'n aansig sonder 'n sirkelvormige gat* = side × side = 45cm × 45cm ✓SF = 2 025 cm^2 ✓A ✓A	1SF substituting correct value 1A correct area 1A correct unit (3)	M L2
3.1.1(b)	Area of hole/*Oppervlakte van gat* = π × $radius^2$ = 3,142 × 9,5 cm × 9,5 cm ✓SF = 283,5655cm^2 ✓A Area of sides ✓MA ✓MA ✓M = 2 025 cm^2 × 6 – 2 (283,5655 cm^2) = 11 582,869 cm^2 **OR/*OF*** Area of hole/*Oppervlakte van die gat* = π × $radius^2$ = 3,142 × $(9,5cm)^2$ ✓SF = 283,5655cm^2 ✓A Area of faces without holes + area with faces with holes/*Oppervlakte van die aansigte met gate + oppervlakte van aansigte sonder gate* = (4 × 2 025cm^2) + [2 × (2 025 – 283,5655)] ✓CA = 8 100cm^2 + 2 × 1 741,4345 ✓CA = 8 100cm^2 + 3 482,869cm^2 ✓M = 11 582,869cm^2 **OR/*OF*** Area of hole/*Oppervlakte van die gat* = π × $radius^2$ = 3,142 × $(9,5cm)^2$ ✓SF = 283,5655cm^2 ✓A 2 025 cm^2 × 6 = 12 150 cm^2 ✓MA 3,142 × 9,5 cm^2 283,5655 × 2 ✓MA = 567,131 cm^2 12 150 cm^2 − 567,131 cm^2 ✓M =11 582,869 cm^2	**CA from Question 3.1.1 (a)** 1SF substituting correct value 1A correct area 1MA multiply by 6 1MA multiply by 2 1M subtracting the values **OR/*OF*** 1SF substituting correct value 1A correct area 1CA total area without holes 1CA total area with holes 1M adding both values **OR/*OF*** 1SF substituting correct value 1A correct area 1MA multiply by 6 1MA multiply by 2 1M subtracting the values (5)	M L3

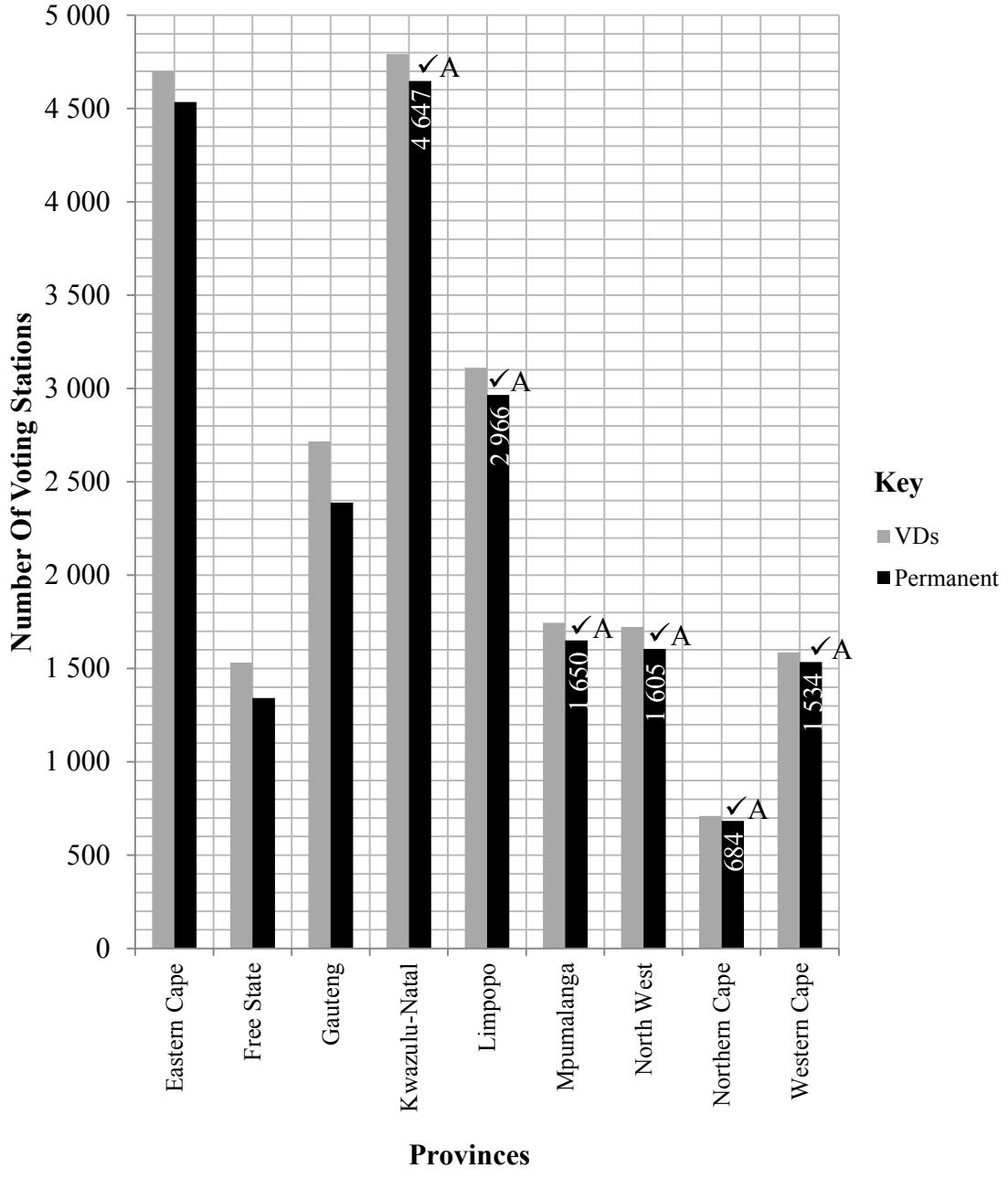
Q/*V*	Solution/*Oplossing*	Explanation/*Verduideliking*	T&L
3.1.1 (c)	Total surface area of 12 chairs: *Totale buite-oppervlakte van 12 stoele:* = 11 582, 869 cm^2 × 12 ✓M = 138 994,428 cm^2 Amount of paint/*Hoeveelheid verf:* = 138 994,428 mℓ ÷ 15 × 1,8 ✓MA = (16 679,33136 ÷ 1 000) ℓ ✓C ≈ 17 ℓ ✓R **OR/*OF*** Amount of paint per chair/*Aantal verf per stoel* = 11 582,869cm² ÷ 15 × 1,8 ✓MA = 1 389,94428 ml ÷ 1 000 ✓C = 1,38994428 ℓ Total surface area of 12 chairs/ *Totale buite-oppervlakte van 12 stoele:* = 1,38994428 l × 12 ✓M = 16,67933136 ℓ ≈ 17 ℓ ✓R	 1M multiplying by 12 1MA ÷ 15 × 1,8 1C converting mℓ to ℓ 1R rounding up **OR/*OF*** 1MA ÷ 15 × 1,8 1C converting mℓ to ℓ 1M multiply by 12 1R rounding up (4)	M L3
3.1.2 (a)	Diameter/*Middellyn* = 2 × r = 2 × 7 cm ✓MA = 14 cm ✓A **OR/*OF*** Diameter/*Middellyn* = 7 cm + 7 cm ✓MA = 14 cm ✓A	 1MA multiplying by 2 1A simplifying **OR/*OF*** 1MA adding correct values 1A simplifying **AO** **NPU** (2)	M L1
3.1.2 (b)	Volume of a cylinder = π × (radius)^2 × height *Volume silinder = π × (radius)^2 × hoogte* 5 000 cm^3 = 3,142 × $(7)^2$ × height ✓SF Height = $\frac{5\ 000}{3{,}142 \times (7)^2}$ ✓M = 32,476… cm ≈ 32,48 cm ✓CA	 1SF substitution – 5 000 cm^3 and 7 1M changing the subject of the Formula 1CA correct height **NPR** (3)	M L2

Q/*V*	Solution/*Oplossing*	Explanation/*Verduideliking*	T&L
3.2.1	High Risk/*Hoë risiko* ✓✓RT	2RT correct answer (2)	M L1
3.2.2	Waist-to-hip ratio = $\frac{\text{waist measurement}}{\text{hip measurement}}$ *Middellyf-tot-Heupverhouding* $=\frac{\text{Middellyfmaat}}{\text{Heupmaat}}$ $= \frac{105}{92}$ ✓SF = 1,141… ✓CA	1SF substituting correct values 1CA answer **NPR** (2)	M L2
3.2.3 (a)	40 to 49 years of age/*jaar oud* ✓✓RT **OR/*OF*** 50 to 59 years of age/*jaar oud* ✓✓RT **OR/*OF*** 60 to 69 years of age/*jaar oud* ✓✓RT	2RT correct age (2)	M L1
3.2.3 (b)	Waist-to-hip ratio = $\frac{\text{waist measurement}}{\text{hip measurement}}$ *Middellyf-tot-Heupverhouding* $=\frac{\text{Middellyfmaat}}{\text{Heupmaat}}$ $0,7826 = \frac{72}{\text{hip measurement}}$ ✓SF Hip measurement $= \frac{72}{0,7826}$ ✓M = 91,5797507 ≈ 92 cm ✓R	1SF substituting correct values in correct formula 1M changing the subject of the formula 1R rounding **AO** (3)	M L2
		[26]	

QUESTION/*VRAAG* 4 [21 MARKS/*PUNTE*]			
Q/*V*	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T&L**
4.1.1	Number of passengers/*Aantal passasiers*: = 60 / sixty/*sestig* ✓✓A	 2A number of passengers (2)	Map L1
4.1.2	Row/*Ry:* K ✓RT Number/*Nommer:* 1 **OR/*OF*** 6 ✓RT	1RT row K 1RT seat 1 **OR** 6 (2)	Map L1
4.1.3	SE/South-east *SO/Suidoos* ✓✓A	2A SE (2)	Map L2
4.1.4	✓A P = $\frac{9}{60}$ ×100% ✓CA = 15% ✓CA	**CA from Question 4.1.1** 1A numerator 1A denominator 1A probability as a percentage (3)	P L2
4.1.5	✓A ✓A A5 / 5A	1A row A 1A seat number 5 (2)	Map L2
4.2.1	8/eight/*agt* airports/*lughawens* ✓✓RT	2RT correct number of airports (2)	Map L1
4.2.2	1 Unit on the map is equal to 10 000 000 units in real life/*1 eenheid op die kaart is gelyk aan 10 000 000 eenhede in werklikheid.* ✓✓A **OR/*OF*** 1 cm/mm on the map is equal to 10 000 000 cm/mm in real life/*1 cm/mm op die kaart is gelyk aan 10 000 000 cm/mm in die werklike lewe.* ✓✓A **OR/*OF*** The real one is 10 000 000 times bigger/*Die regte een is 10 000 000 groter.* ✓✓A **OR/*OF*** The drawing is 10 000 000 times smaller/*die tekening is 10 000 000 kleiner.* ✓✓A	 2A explanation (2)	Map L1

Q/*V*	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T&L**
4.2.3	Actual distance/*Werklike afstand* = 60 mm × 10 000 000 ✓M = 600 000 000 mm ÷ 1 000 000 ✓M = 600 km ✓CA	1M concept of scale 1M conversion 1CA distance **AO** (3)	Map L2
4.2.4	Speed = $\frac{\text{Distance}}{\text{Time}}$ Spoed = $\frac{\text{Afstand}}{\text{Tyd}}$ $= \frac{597}{7\frac{26}{60}}$ ✓A ✓A = 80,314 km/h ✓A	1A substitution - 597 1A time calculation 1A correct average speed **NPR** (3)	Map L2
		[21]	

QUESTION/*VRAAG* 5 [31 MARKS/*PUNTE*]			
Q/*V*	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T&L**
5.1.1	Survey / Questionnaire / Interviews *Opname / Vraelys / Onderhoude* ✓✓A	2A correct instrument (2)	D L1
5.1.2	KwaZulu-Natal/KZN ✓✓RT	2RT correct province (2)	D L1
5.1.3	Mean number of voting stations/*Gemiddelde aantal stemlokale* $= \frac{22\,612}{9}$ ✓A ✓MA = 2 512,4444444 ≈ 2 512 **OR/*OF*** 2 513 ✓R	 1A numerator 1MA dividing by 9 1R to the nearest whole number (3)	D L2
5.1.4	0 ✓✓RT	2RT for mode = 0 (2)	D L2
5.1.5	Percentage/*Persentasie* = $\frac{1228}{22\,612} \times 100\ \%$ ✓RT ✓M = 5,43 % ✓A	1RT correct values 1M percentage calculation 1A simplification **NPR** **AO** (3)	D L1
5.1.6	$P_{(\text{Gauteng VD})}$ = 0% **OR/*OF*** 0 **OR/*OF*** no chance **OR/*OF*** impossible **OR/*OF*** $\frac{0}{2716}$ ✓✓A	2A stating 0% or impossible (2)	P L2
5.1.7	✓RT 3 111 – 2 966 ✓M = 145 **OR/*OF*** ✓M ✓M 1 228 – (161+189+327+133+82+115+26+50) = 145 **OR/*OF*** ✓M 1 228 – 1 083 ✓M = 145	1RT reading correct values 1M subtracting values in correct order **OR/*OF*** 1M adding all the values 1M subtracting from 1 228 **OR/*OF*** 1M adding all the values 1M subtracting from 1 228 (2)	D L1

Q/*V*	Solution/*Oplossing*	Explanation/*Verduideliking*	T&L
5.1.8	 1A for each correctly plotted bar × 6 (6)		D L2

Q/*V*	Solution/*Oplossing*	Explanation/*Verduideliking*	T&L
5.2.1	Sport ✓MA = 100% – (42,9 + 2,8 + 11 + 20,7 + 2,4 + 18,4 +0,7)% = 1,1% ✓CA **OR/*OF*** = 100% – 98,9% ✓MA = 1,1% ✓CA	1MA subtract values 1CA correct percentage **OR/*OF*** 1MA subtract values 1CA correct percentage **AO** (2)	D L1
5.2.2	Car/Motorcar *Kar/Motor* ✓✓RT	1RT correct modus (2)	D L1
5.2.3	$P_{(\text{people travelling by bus})} = 7{,}8\%$ ✓RT $= \frac{7{,}8}{100}$ ✓M $= \frac{39}{500}$ ✓A **OR/*OF*** ✓RT ✓M $P(\text{bus}) = \frac{7{,}8}{100} \times \frac{10}{10}$ $= \frac{78}{1000}$ $= \frac{39}{500}$ ✓A	1RT correct percentage (7,8%) 1M out of 100 1A fraction form **OR/*OF*** 1RT correct percentage (7,8%) 1M out of 100 1A fraction form (3)	P L2
5.2.4	Number of people/*Aantal mense* = 542 267 × 42,9% ✓M = 232 632,543 ≈ 232 632 **OR/*OF*** 232 633 ✓CA	 1M multiplying correct values 1CA number of people **NPR** – whole number (2)	D L1
		[31]	
		TOTAL/TOTAAL: 150	