



education

Department:
Education
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

PROVINCIAL ASSESSMENT/ PROVINSIALE ASSESSERING

**GRADE 11/
GRAAD 11**

**MATHEMATICAL LITERACY P1/
WISKUNDIGE GELETTERDHEID V1
JUNE 2024/ JUNIE 2024**

MARKING GUIDELINES/NASIENRIGLYNE

MARKS/PUNTE: 75

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 table/a graph/document/diagram/Lees vanaf tabel/grafiek/document/diagram
SF	Correct substitution in a formula/Korrekte vervanging in formule
O	Opinion/Explanation/Reasonig/Opinie/Verduideliking/Redenasie
P	Penalty, e.g. for no units, incorrect rounding off, etc./Penalisasie, bv. Vir geen eenhede/verkeerde afronding, ens.
R	Rounding/Afronding
NPR	No penalty for correct rounding/Geen penalisasie vir korrekte afronding nie
AO	Answer only/Slegs antwoord
MCA	Method with constant accuracy/Metode met volgehoue akkuraatheid
RCA	Rounding consistent with accuracy/Afronding met volgehoue akkuraatheid

**These marking guidelines consist of 9 pages./
Hierdie nasienriglyne bestaan uit 9 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.
- NOTE: consistent accuracy (CA) does not apply in cases of a breakdown.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalise for every extra item presented.
- As a general principle, if a candidate has incurred one mistake and there is evidence of sound mathematics thereafter, then that candidate should lose one mark only.
- Rounding is an independent mark.
- In order to award the verification/conclusion mark the candidate must have scored at least one mark in the calculation preceding the final conclusion.

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.
- LET WEL: volgehoue akkuraatheid (CA) geld nie in die geval van 'n afbreuk nie.
- Wanneer 'n kandidaat aflesings vanaf 'n grafiek, tabel, uitlegplan en kaart geneem en ekstra antwoorde gee, penaliseer vir elke ekstra item.
- 'n Algemene nasienbeginsel is dat indien 'n kandidaat een fout maak en daarna voortgaan met korrekte wiskunde, dat die kandidaat slegs een punt verloor.
- Afronding tel as 'n afsonderlike punt.
- Ten einde die verifikasie/gevolgtrekking punt toe te ken moes die kandidaat ten minste een punt gekry het in die berekening wat lei tot die finale gevolgtrekking.

QUESTION 1/VRAAG 1 [14 MARKS/PUNTE] AO – Full marks			
Q/V	Solution/Oplossing	Explanation/Verduideliking	T/L
1.1.1	C ✓✓A	2A Correct option (2)	DH L1
1.1.2	A ✓✓A	2A Correct option (2)	F L1
1.1.3	B ✓✓A	2A Correct option (2)	DH L1
1.1.4	C ✓✓A	2A Correct option (2)	DH L1
1.2.1	Gross income / <i>Bruto inkomste</i> = R14 000,00 + R11 500,00 ✓MA = R25 500,00 ✓A	1MA Adding income values 1A Answer gross income (2)	F L1
1.2.2	B ✓✓A	2A Correct answer (2)	F L1
1.2.3	Net income / <i>Netto inkomste</i> ✓✓A	2A Answer (2)	F L1
			[14]

QUESTION 2/VRAAG 2 [22 MARKS/PUNTE]			
Q/V	Solution/Oplossing	Explanation/Verduideliking	T/L
2.1.1	Cell phone make = Samsung ✓✓A	2A Correct answer (2)	F L1
2.1.2	✓RT Subtotal = R2 607,83 × 15% ✓MA = R391,17	1RT Use correct value 1MA Multiply with 15% (2)	F L1
2.1.3	ENG: Two thousand, Nine hundred and ninety nine Rand ✓✓A AFR: <i>Tweeuisend, Negehonderd Nege-en-negentig Rand</i> ✓✓A	2A Correct answer (2)	F L1
2.1.4 a)	Quote valid from 15 March + 14 days ✓MA 28 March ✓A	1MA add 14 days to 15 March 1A Answer correct date (2)	F L2
2.1.4 b)	Quotes are only valid for a certain time period because prices of goods and services go up after a while, and the supplier don't want to lose money/ ✓✓O <i>Kwotasies is slegs geldig vir 'n sekere tydperk want pryse van goedere en dienste gaan op na 'n tydperk, en die verskaffer wil nie geld verloor nie</i> ✓✓O	2O Explanation (2)	F L4
2.2.1	✓✓A Number of minutes /Aantal minute	2A Answer (2)	F L1
2.2.2	Fixed cost /Vaste koste = R200 ✓✓A	2A Answer (2)	F L1
2.2.3	Prepaid option /Vooruitbetaalde opsie = R400 ÷ 200 minutes ✓MA = R2 per minute A = Prepaid price plan / Vooruitbetaalde prysplan ✓A Total cost = R2,00 × number of minutes ✓A	1MA Dividing with 20 minutes 1A Correct value R2,00 1A Multiply with number of minutes (3)	F L3
2.2.4	Break even pint / Gelykbreekpunt = 130 minutes ✓✓RT	2RT Correct answer (2)	F L2

2.2.5	<p>Contract option / <i>Kontrak opsie</i> = R344 – R200 ✓MA = R144 for 200 minutes</p> <p>* 80 free minutes = 200 minutes – 80 minutes ✓MA = 120 minutes</p> <p>Cost per minute / <i>Koste per minuut</i> = R144 ÷ 120 minutes = R1,20 per minute ✓</p>	<p>1MA Subtract fixed cost</p> <p>1MA Subtract free minutes</p> <p>1A Answer cost per minute - contract (3)</p> <p>Any values from table can be used to calculate the cost per minute</p>	<p>F L3</p>
			[22]

QUESTION 3/VRAAG 3 [20 MARKS/PUNTE]			
Q/V	Solution/Oplossing	Explanation/Verduideliking	T/L
3.1.1	Other colour cars / <i>Ander kleur motors</i> $= 2 + 3 + 5 + 2 + 4 + 2$ ✓MA $= 18$ ✓A	1MA Adding correct values 1A Answer coloured cars AO (2)	DH L2
3.1.2	Average (mean) / <i>Gemiddeld</i> $= \frac{7 + 9 + 12 + 8 + 13 + 11}{6}$ ✓ $= 60 \div 6$ months ✓ $= 10$ ✓	1M Adding white cars 1M Dividing with 6 months 1CA Average white cars (3)	DH L2
3.1.3	7; 8; 9; 11; 12; 13 ✓MA Median = $\frac{9 + 11}{2}$ ✓MA Median = $20 \div 2$ Median = 10 ✓A	1MA Arrange values 1MA Median concept 1A Median white cars (3)	DH L2
3.1.4	Range = biggest – smallest/ <i>Omvang = Grootste – kleinste</i> $8 = \text{Big} - 2$ ✓SF $\text{Big} = 8 + 2$ ✓M $\text{Big} = 10$ ✓CA	1SF Substitution 1M Change subject of formula 1CA Answer (3)	DH L3
3.1.5	Probability (March white car)/ <i>Waarskynlikheid (Maart wit motor)</i> $= \frac{12}{60}$ ✓A $= 0,2$ ✓CA	1A Numerator 1A Denominator 1CA Decimal number (3)	P L3
3.2	ANSWER SHEET/ <i>ANTWOORDBLAD</i>	1A Correct bars – White cars Feb 1A Correct bar – White cars May 1A Correct bar – Other cars Jan 1A Correct bar – Other cars May (4)	DH L2

3.3	Fuel consumption / <i>Brandstof</i> <i>verbruik</i> ✓✓ O <p style="text-align: center;">OR</p> Number of kilometres on the clock / <i>Aantal kilometre op die klok</i> ✓✓ O <p style="text-align: center;">OR</p> Price of the car/ <i>Prys van die kar</i> ✓✓ O	2O Reason <p style="text-align: right;">(2)</p>	DH L4
			[20]

QUESTION 4/VRAAG 4 [19 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T/L
4.1	% cleaning water of total water $= \frac{2,5 \text{ kl}}{5,5+2,5+4,8+1,3+5,9} \times 100 \checkmark A$ $= \frac{2,5 \text{ kl}}{20 \text{ kl}} \times 100 \checkmark M$ $= 12,5\% \checkmark CA$	1M Adding total water consumption 1M Multiply fraction with 100 1CA Answer % (3)	F L2
4.2	P (bath water)/(badwater) $= \frac{2,8 \text{ k} \checkmark A}{4,8 \checkmark A}$ $= \frac{7}{12} \checkmark CA$	1A Numerator 1A Denominator 1CA Simplified fraction (3)	P L2
4.3	Block 1 $0-6 = 6 \text{ kl} \times 0,00\text{c} = 0,00\text{c}$ $7-15 = 9 \text{ kl} \times 1095\text{c} = 9855\text{c}$ $16-20 = 5 \text{ kl} \times 1248\text{c} = 6240\text{c}$ <p>Total cost in cent $= 0,00\text{c} + 9855\text{c} + 6240 \text{ c}$ $= 16095\text{c} \checkmark CA$</p> <p>Total cost in Rand $= 16095\text{c} \div 100$ $= R160,95 \checkmark C$</p> <p>Total cost in Rand, VAT added $= R160,95 \times 1,15 \checkmark M$ $= R185,09 \checkmark CA$</p> <p>His claim is NOT valid $\checkmark O$ <i>Sy bewering is NIE geldig NIE</i></p>	1MA Dividing 20 kl into blocks 1MA Multiply with correct cost per block 1CA Total cost in cent 1C Convert to rand 1M Multiply with VAT 1CA Total cost with VAT 1O Opinion (7)	F L4
4.4	Continuous/Kontinu $\checkmark A$ It is values that can be measured./ <i>Dit is waardes wat gemeet kan word.</i> $\checkmark \checkmark O$	1A Answer - Continuous 2O Reason (3)	DH L4
4.5	Pie chart/Sirkeldiagram $\checkmark A$ It is better to compare percentages than only indicating different values./ <i>Dit is beter om persentasies te vergelyk as om net die verskillende waardes aan te dui.</i> $\checkmark \checkmark O$	1A Type of graph 2O Percentage's reason (3)	DH L3
			[19]
		TOTAL/TOTAAL:	75

