KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA



NATIONAL SENIOR CERTIFICATE

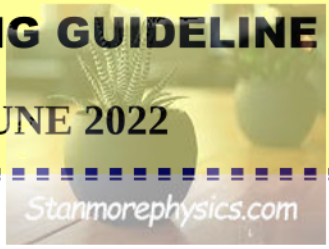
GRADE 12

MATHEMATICAL LITERACY P1

COMMOM TEST

MARKING GUIDELINE

JUNE 2022



MARKS: 100

SYMBOL	EXPLANATION
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT/RG/RD/RM	Reading from a table/ graph/ diagram/map
SF	Correct substitution in a formula
O	Opinion/ reason/deduction/example/Explanation
J	Justification
R	Rounding off
F	deriving a formula
AO	Answer only full marks
P	Penalty e.g. for units, incorrect rounding off etc.
NPR	No penalty for rounding / units

This marking guideline consists of 8 pages.

Copyright Reserved

QUESTION 1 [30 MARKS]			
Ques	**Solution**	**Explanation**	**T & L**
1.1.1	Unemployment rate with the greatest frequency✓✓A	2A correct definition 1-mark general definition (2)	DH L1
1.1.2	26%✓✓RG	2RG reading from graph (2)	DH L1
1.1.3	Q_2 ✓RG 2020✓RG	1RG for correct quarter 1RG for correct year (2)	DH L1
1.1.4	Difference $= 38{,}2\% - 24{,}8\%$✓MA $= 13{,}4\%$✓A	1MA method 1A answer **AO** (2)	DH L1
1.1.5	Difference $= 38{,}2\% - 32{,}8\%$✓MA $= 5{,}4\%$✓CA **OR** Difference $= 32{,}8\% - 38{,}2\%$✓MA $= -5{,}4\%$✓CA	1MA subtracting 1CA answer **OR** 1MA subtracting 1CA answer (2) **AO**	DH L1
1.1.6	Broken line graph✓✓A	2A correct graph (2)	DH L1
1.2.1	R6 621,08✓✓A	2A correct balance amount (2)	F L1
1.2.2	01 March 2022 **OR** 01/03/22✓✓A	2A correct date (2)	F L1
1.2.3	31 days✓✓A	2A correct number of days (2)	F L1
1.2.4	R6 441,83✓✓A	2A correct balance amount (2)	F L1
1.2.5	✓RT ✓MA ✓MA R6 441,83 + (R2,80 + R20 + R97,55 + R22 + R36,90)	1RT for R6 441,83 1MA first 2 amounts 1MA last 2 amounts (3)	F L1
1.2.6	Percentage $= \frac{\text{R6 441,83}}{\text{R12 000}} \times 100\%$✓M $= 53{,}68\%$✓A	1M multiplying by 100 1A answer **NPR** (2)	F L1
1.2.7	Change $= 18\% - 17.75\%$ $= 0{,}25\%$✓✓A	2A correct percentage **Accept** 18% (2)	F L1
1.2.8	✓RT✓RT 1 520 : 760 $= 2 : 1$✓A	1RT for 1520 1RT for 760 1A for simplification (3)	F L1
		[30]	

Stanmorephysics.com

QUESTION 2 [29 MARKS]			
2.1.1	Total tax revenue = (R587,9 + R439,7 + R269,9 + R117,4 + R89,1 + R94,5) billion✓✓MA = R1 598,5 billion✓CA **OR** = R1 598 500 000 000✓CA	2MA adding 1CA correct answer (3)	F L2
2.1.2	Percentage = $\frac{\text{R587,9}\checkmark\text{RG}}{\text{R1 598,5}\checkmark\text{CA}} \times 100\%$ = 36,78%✓CA The statement is INCORRECT✓O 	**CA from Q2.1.1** 1RG numerator 1CA denominator 1CA correct % 1O opinion (4)	F L4
2.1.3	✓C ✓M Deficit = R1,5985 trillion − R2,16 trillion = −R0,5615 trillion ✓CA **OR** ✓C ✓M Deficit = R1 598,5 billion − R2 160 billion = −R561,5 billion ✓CA **OR** ✓C ✓M Deficit = R1 598 500 000 000 − R2 160 000 000 000 = −R561 500 000 000✓CA	**CA from Q2.1.1** 1C conversion to trillions 1M subtraction 1CA answer **OR** 1C conversion to billions 1M subtraction 1CA answer **OR** 1C conversion to billions 1M subtraction 1CA answer (3)	F L2
2.1.4	Reduce expenditure✓✓O **Accept any other suggestion given on Annexure B**	2O opinion (2)	F L4
2.1.5	Current debt = \$293 625 590 300 ÷ \$0,068✓M = R4 318 023 387 000✓A = R4 318,023 387 billion✓C ≈ R4 300 billion✓R **OR** ≈ R4 300 000 000 000	1M dividing by 0,068 1A correct answer 1C billion conversion 1R rounding (4)	F L3
2.2.1	Free water ✓✓O	2O explanation (2)	F L4

Copyright Reserved

2.2.2	✓MA ✓M A Cost $= 6(0) + 4(20{,}28) + 5(21{,}17) + 5(29{,}68) + 10(41{,}01) + 8(44{,}86)$ ✓M $=$ R1 104,35✓CA	1MA first three blocks/bands 1MA second three blocks/bands 1M adding 1CA correct answer (4)	F L2
2.2.3	Amount excluding VAT $=$ R407,23 $\div$ 1,15✓MA $=$ R354,11✓A No of kl = R354,11 – 6(0) = R354,11 - 4(19,36) = R276,67 – 5(20,20) = R 175,67 – 5(28,32))✓MA = R34,70 ÷ R39,14✓M = 0 ,87 kl✓CA Total consumption $= 6 + 4 + 5 + 5 + 0{,}87$✓M $= 20{,}87$ kℓ✓CA **OR** R354,11 $= 6(0) + 4(19{,}36) + 5(20{,}20) + 5(28{,}32) + x(39{,}14)$✓MA $x =$ (R354,11 − R320,04) ÷ R39,14✓M $= 0{,}87$ kℓ✓CA Total consumption $= 6 + 4 + 5 + 5 + 0{,}87$✓M $= 20{,}87$ kℓ✓CA	 1MA dividing by 1,15 1A correct answer 1MA subtracting all correct values 1M dividing by R39,14 1CA answer 1M adding 1CA correct answer 1MA dividing by 1,15 1A correct answer 1MA adding 1M dividing by R39,14 1CA correct answer 1M addition 1CA answer (7)	F L3
		[29]	

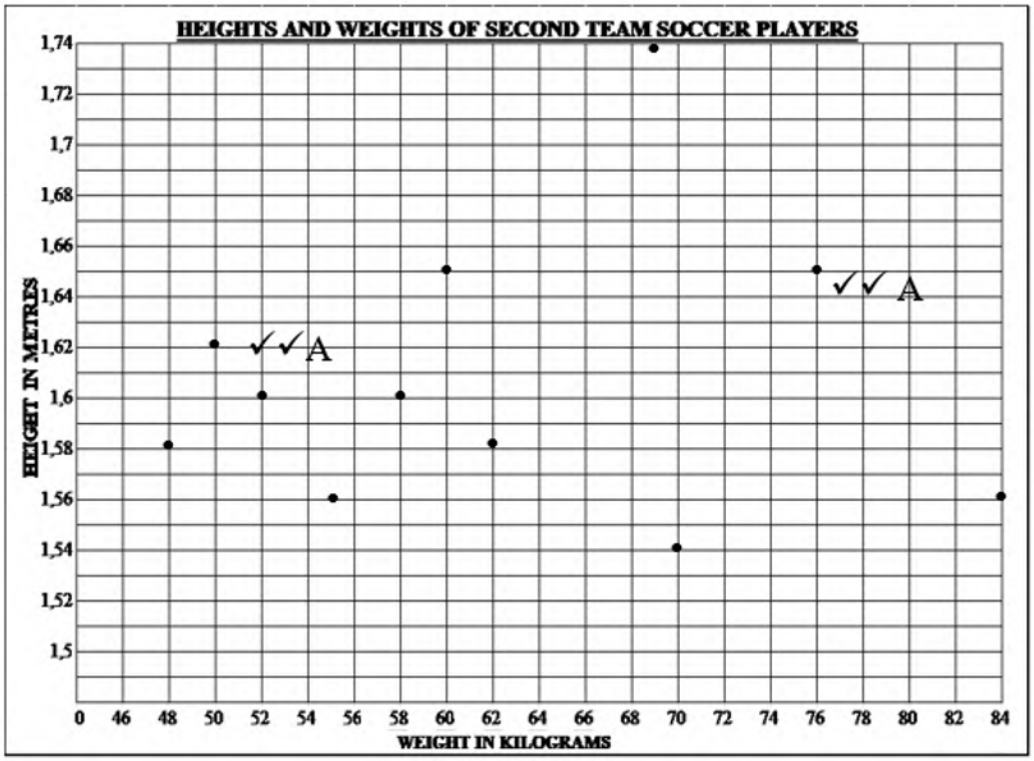
QUESTION 3 [23 MARKS]			
3.1.1	$\text{Cost} = \frac{\text{R32,99}}{1{,}0409\checkmark\text{M}}$ $= \text{R31,69}\checkmark\text{A}$ **OR** $\text{Cost} = \frac{\text{R32,99} \times 100}{104{,}09\checkmark\text{M}}$ $= \text{R31,69}\checkmark\text{A}$	1M dividing by 1,0409 1A answer 1M dividing by 1,0409 1A answer (2)	F L2
3.1.2	$2022: \text{Cost} = \text{R17,99}$ $2023: \text{Cost} = 104{,}26\% \times \text{R17,99}\checkmark\text{M}$ $= \text{R18,76}\checkmark\text{A}$ $2024: \text{Cost} = 104{,}36\% \times \text{R18,76}\checkmark\text{M}$ $= \text{R19,58}\checkmark\text{A}$	1M multiplying by 104,26% 1A answer 1M multiplying by 104,36% 1A answer (4)	F L3
3.1.3	$\text{Basket cost in 2023} = 104{,}26\% \times \text{R498,88}\checkmark\text{M}$ $= \text{R520,13}\checkmark\text{A}$ $\text{Purchasing power} = \frac{\text{R498,88}\checkmark\text{A}}{\text{R520,13}\checkmark\text{CA}} \times 100\%\checkmark\text{SF}$ $= 95{,}91\%$ Claim is CORRECT✓O	1M multiplying by 104,26% 1A correct answer 1A numerator 1SF substitution 1CA denominator 1O opinion (6)	F L4
3.2.1	$\text{Deposit} = 20\% \times \text{R950 000}$ $= \text{R190 000}\checkmark\text{A}$ $\text{Loan Amount} = \text{R950 000} - \text{R190 000}\checkmark\text{M}$ $= \text{R760 000}\checkmark\text{CA}$ **OR** ✓A Deposit = 80%× R950 000 ✓M $= \text{R760 000}\checkmark\text{CA}$	1A correct deposit 1M subtracting 1CA answer 1A for 80% 1M multiplying 1CA answer (3)	F L3

Copyright Reserved

3.2.2	✓A $\text{Monthly Repayment} = \frac{\text{R760 000} \times 9{,}65}{1\,000}$ ✓SF $= \text{R7 334}$ ✓CA	**CA from Q3.2.1** 1A correct factor 1SF substitution 1CA answer (3)	F L2
3.2.3	✓C $\text{Real Cost of Loan} = \text{R7 334} \times 240$ ✓SF $= \text{R1 760 160}$ ✓CA 	**CA from Q3.2.2** 1C conversion 1SF substitution 1A correct answer (3)	F L2
3.2.4	$\text{Interest} = \text{R1 760 160} - \text{R760 000}$ ✓MCA $= \text{R1 000 160}$ ✓CA	**CA from Q3.2.1 and Q3.2.2** 1MCA subtracting 1CA answer (2)	F L2
		[23]	

Copyright Reserved

Stanmorephysics.com

QUESTION 4 [18 MARKS]			
4.1.1	The data is continuous✓A The data is measurable ✓O	1A correct type of data 1O reason (2)	DH L4
4.1.2		2A correct clustered points 2A correct spread points (4)	DH L2
4.1.3	There is no correlation ✓✓O	**CA from 4.1.2** 2O opinion (2)	DH L4
4.1.4	Easy to show the relationship between two sets of data✓✓O	2O opinion (2)	DH L4

Copyright Reserved

4.1.5	$\text{Mean} = \frac{48 + 55 + 50 + 58 + 62 + 60 + 52 + 69 + 76 + 84 + 70 \checkmark \text{MA}}{11 \checkmark \text{M}}$ $= 62 \checkmark \text{CA}$	1MA adding 1M dividing by 11 1CA answer (3)	DH L2
4.2.1	$\text{A} = \frac{1}{3} \checkmark \text{A}$ $\text{B} = \frac{1}{2} \checkmark \text{A}$	1A for correct answer 1A for correct answer (2)	P L3
4.2.2	$\text{P(G\&B)} = \frac{1}{6} \checkmark \text{A}$ $= \frac{1}{6} \times 100\% \checkmark \text{M}$ $= 16{,}7\% \checkmark \text{R}$	1A correct answer 1M multiplying by 100% 1R rounding (3)	P L2
		[18]	
			TOTAL: 100

Stanmorephysics.com

Copyright Reserved