



education

Department:
Education
PROVINCE OF KWAZULU-NATAL

MATHEMATICAL LITERACY P1

COMMON TEST

JUNE 2019

MARKING GUIDELINE

**NATIONAL
SENIOR CERTIFICATE**

GRADE 10

MARKS: 50

SYMBOL	EXPLANATION
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy (Answer)
C	Conversion
S	Simplification
RT/RG/RD	Reading from a table/ graph/ diagram
NPR	No penalty for units/rounding
SF	Correct substitution in a formula
O	Opinion/ reason/deduction/example
J	Justification
R	Rounding off/
F	deriving a formula
E	Explanation
U	Units
AO	Answer only full marks

This marking guideline consists of 4 pages.

QUESTION 1 [12 MARKS]

QUE	Solution	Explanation	
1.1.1	167 ✓✓RT	2RT, Answer	(2)
1.1.2	✓MA A = 52 - 23 = 29 ✓A OR ✓MA A = 84 - 26 - 29 = 29 ✓A ✓MA B = 167 - 84 = 83 ✓M OR ✓MA B = 23 + 36 + 24 = 83 ✓A	IMA, Subtracting correct values 1A, Answer OR IMA, Subtracting correct values 1A, Answer IMA, Subtracting correct values 1A, Answer OR IMA, Adding correct values 1A, Answer AO	(4)
1.1.3	Common fraction = $\frac{29}{167}$ ✓A	1A, Numerator 1A, Denominator	(2)
1.2.1	Fig. No.1 = Ratio scale or Number scale ✓A Fig. No.2 = Bar scale ✓A	1A, Answer 1A, Answer	(2)
1.2.2	C ✓✓A	2A, Answer	(2)
[12]			

QUESTION 2 [20 MARKS]			
QUE	Solution	Explanation	TL
2.1.1	Number of paces = $\frac{9m}{0.9m}$ = 10 ✓A	IM, Dividing 9m by 0.9m 1A, Number of paces AO	M L2 (2)
2.1.2	Number of Loads = $\frac{400L}{50L}$ = 8 wheel barrows ✓A	IM, Dividing 400L by 50L 1A, Number of loads AO	M L2 (2)
2.1.3	Number of sachets = $\frac{10\,000\,ml}{750\,ml}$ = 13,333 ✓A = 14 ✓R	IM, Dividing 10 000ml by 750ml 1A, Answer 1R, Rounding up	M L2 (3)
2.1.4	Winner's Prize = $\frac{3}{6} \times R2\,000$ ✓MA = R1 000 ✓A	IMA, Ratio concept IM, Multiplying by R2 000 1A, Answer	F L2 (3)
2.2.1	March ✓✓RT	2RT, Answer	M L1 (2)
2.2.2	Duration = 16:30 – 9:00 ✓M = 7 hours and 30 minutes ✓A OR Duration = 4:30pm – 9:00am ✓M = 7 hours and 30 minutes ✓A	IM, Subtracting times 1A, Duration OR IM, Subtracting times 1A, Duration	(2)
2.2.3	P(no rain) = $\frac{100\% - 10\%}{100\%}$ ✓A = $\frac{9}{10}$ ✓A OR P(no rain) = 0,9 ✓✓✓A OR P(no rain) = 90% ✓✓✓A	1A, Numerator 1A, Denominator 1A, Answer AO	P L2 (3)
2.2.4	A = No rain, Windy ✓A B = Rain, No wind ✓A C = Rain, Hail ✓A	1A, Correct outcome 1A, Correct outcome 1A, Correct outcome	P L1 (3)
			[20]

QUESTION 3 [18 MARKS]

QUE	Solution	Explanation	TL
3.1.1	50 : 1 500 ✓MA 1 : 30 ✓S	IMA, Correct ratio and order IS, Simplification AO	B L2 (2)
3.1.2	Number of teachers in 2019 = $\frac{1}{30} \times 2\,300$ ✓M = 76,666 ✓S ≈ 77 ✓CA Difference of teachers = 77 – 50 ✓MA = 27 ✓CA OR Number of teachers in 2019 = $\frac{2\,300}{1\,500} \times 50$ ✓M = 76,666 ✓S ≈ 77 ✓CA Difference of teachers = 77 – 50 ✓MA = 27 ✓CA	IM, Ratio concept IS, Simplification ICA, Number of teachers in 2019 IMA, Subtraction ICA, Answer OR IM, Ratio concept IS, Simplification ICA, Number of teachers in 2019 IMA, Subtraction ICA, Answer	B L2 (5)
3.1.3	Male % teachers = $\frac{20}{50} \times 100\%$ ✓M = 40% ✓A	IM, Percentage concept 1A, Answer AO	B L2 (2)
3.1.4	Year school established = 1985 – 10 ✓M = 1975 ✓A School age = 2019 – 1975 = 44 years ✓CA OR School age = (2019 – 1985) + 10 ✓M = 44 years ✓CA	IM, Subtracting 10 years 1A, Year school established ICA, School age OR IM, Subtracting 1985 1M, Adding 10 years ICA, Period	B L2 (3)
3.2.1	Field ✓A Library ✓A	1A, Answer 1A, Answer	MP L1 (2)
3.2.2	Classrooms ✓✓A	2A, Answer	MP L1 (2)
3.2.3	It is between the pool and field. ✓✓A OR Right of the pool. ✓✓A OR Left of the field. ✓✓A	2A, Answer	MP L1 (2)
			[18]

TOTAL: 50