



KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 11

MATHEMATICAL LITERACY

COMMON TEST

MARCH 2024

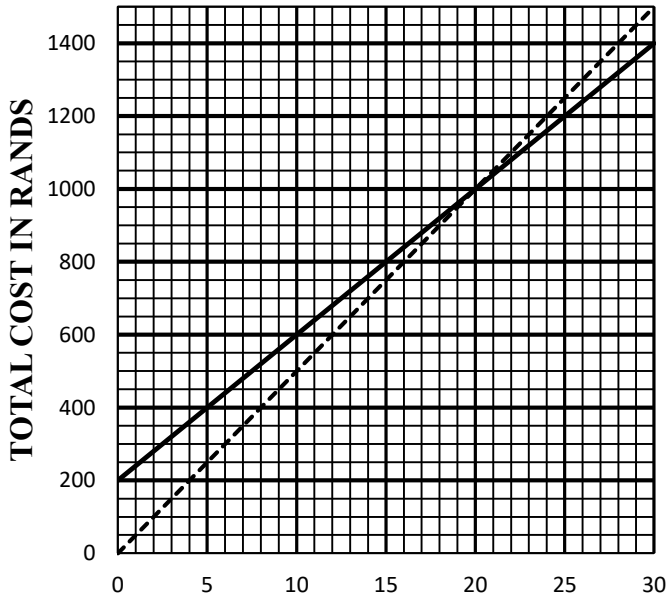
MARKING GUIDELINE

MARKS: 100

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	Correct Rounding
F	deriving a formula
E	Explanation
U	Units
AO	Answer only full marks

This marking guideline consists of 6 pages.

QUESTION 1 [22]		ANSWER ONLY FULL MARKS	
QUE	SOLUTION	EXPLANATION	L/T
1.1.1	Total amount = $R65 \times 8$ ✓M = R520 ✓A	1M, Multiplying by 8hours 1A, Amount received (2)	L1 F
1.1.2	No. of hours = $\frac{R325}{R65}$ ✓M =5 hours ✓A	1M, Dividing by correct rate 1A, No. of hours (2)	L1 F
1.1.3	✓✓M Overtime rate = $140\% \times R65$ =R91 OR ✓M Overtime rate = $40\% \times R65 + R65$ =R26 +R65 ✓M =R91	1M, Sum of 140% 1M, Multiplying by correct rate OR 1M, Multiplying by 40% 1M, Adding R65 (2)	L1 F
1.2.1	Mbomvu MK ✓✓RT	2RT, Correct client name (2)	L1 F
1.2.2	Total due = R1300,00 ✓✓RT OR ✓M Total due = $R300 + R300 + R700$ =R1300 ✓A OR ✓M Total due = $R1130.44 + R169,56$ =R1300 ✓A	2RT, Correct amount OR 1M, Adding correct values 1A, Correct total due OR 1M, Adding correct values 1A, Correct answer. (2)	L1 F
1.2.3	Unit Price = $R150$ ✓✓RT OR Unit Price = $\frac{R300}{2}$ ✓M =R150 ✓A	2RT, Correct unit price OR 1M, Dividing R300 by 2 1A, Correct unit price (2)	L1 F
1.2.4	Saleesmac ✓✓RT	2RT, Correct Name (2)	L1 F
1.3.1	142g :156g ✓M 71:78 ✓CA	1M, Correct ratio and order 1CA, Simplified ratio form (2)	L1 M
1.3.2	3.6min $\times 60$ ✓M 216 seconds ✓A	1M, Multiplying by 60 1A, Correct answer (2)	L1 M
1.3.3	Number of balls = 6×90 overs ✓M =540 balls ✓A	1M, Multiplying by 90 1A, Correct No. of balls (2)	L1 M
1.3.4	11:00 am ✓✓A	2A, Correct time format (2)	L1 M
			[22]

QUESTION 2[32]			
QUE	SOLUTION	EXPLANATION	L/T
2.1.1	Option A rental cost = $R50 \times \text{No. of days}$ ✓✓A	2A, Correct formula (2)	L2 F
2.1.2	$R1320 = R200 + R40 \times \text{No of days}$ ✓SF Number of days = $\frac{R1320-R200}{R40}$ ✓M =28 days ✓CA	1SF, Correct Substitution 1M, Changing subject of the formula 1CA, No. of days (3)	L3 F
2.1.3	Option A cost = $R50 \times 25$ =R1250 ✓CA Option B cost = $R200 + R40 \times 25$ =R1200 ✓CA Valid statement. ✓J	1CA, Option A cost 1CA, Option B cost 1J, Correct opinion (3)	L4 F
2.1.4(a)	Cost in Rand ✓✓A	2A, Correct variable Accept Option A OR Option B (2)	L1 F
2.1.4(b)	$A = \frac{R900}{R50}$ ✓M =18 ✓A OR $A = \frac{R920 - R200}{R40}$ ✓M =18 ✓A $B = R50 \times 26$ ✓MA =R1300 ✓A	1MA, Dividing by correct rate 1A, Correct no. of days OR 1MA, Subtracting R200 & dividing by R40 1A, Correct answer 1MA, Multiplying correct values 1A, Correct answer (4)	L3 F
2.1.4(c)	TOTAL COST OF HIRING CRUTCHES  NUMBER OF DAYS		L3 F 1A, Correct starting point 1CA, TWO correct points 1CA, Joining point (straight line) 1A, Labelling the graph (4)

QUE	SOLUTION	EXPLANATION	L/T
2.2.1	consumption is the number of litres of fuel the truck uses to travel a certain distance. ✓✓E OR 6,9ℓ of petrol used by the truck to travel 100km. ✓✓E	2E, Correct explanation OR 2E, Correct explanation (2)	L1 F
2.2.2	No. of litres = $\frac{800\text{km} \times 6,9\ell}{100\text{km}}$ ✓M =55,2ℓ ✓CA =53ℓ ✓R	1M, Multiplying by correctly rate 1CA, Answer 1R, Correct Rounding (3)	L3 M
2.2.3	Total distance = 440×2 =880km ✓A Number of litres = $\frac{880\text{km}}{100\text{km}} \times 6,9\ell$ =60,72ℓ CA Invalid statement, 60 litres won't be enough. ✓O	1A, Total distance 1CA, No. of litres 1O, Justification. (3)	L4 M
2.3.1	Combination relationship ✓✓A	2A, Correct answer (2)	L1 F
2.3.2	C ✓✓A	2A, Correct answer (2)	L1 F
2.3.3	R700 ✓✓RT OR Cost = $R200 + R10 \times 50$ ✓MA =R700 ✓A	2RT, Correct amount OR CA from 2.3.2 1MA, Correct substitution into the correct formula 1A, Answer (2)	L2 F
			[32]

	QUESTION 3 [22]		
QUE	SOLUTION	EXPLANATION	L/T
3.1.1	$\checkmark$ SF $\checkmark$ C Volume = $20\text{cm} \times 18\text{cm} \times 10\text{cm}$ $= 3\,600\text{cm}^3 \checkmark$ A	1SF, Correct substitution 1C, Conversion 1A, Answer (3)	L2 M
3.1.2	Price of ONE tea bag = $\frac{R47,95}{100} \checkmark$ M $= R0,48 \checkmark$ CA	1M, Dividing correct values 1CA, Answer AO (2)	L2 F
3.1.3	Number of slices = $150 \times 4 \checkmark$ M $= 600$ Number of breads = $\frac{600}{20} \checkmark$ CA $= 30$ Number of dozens = $\frac{30}{12} \checkmark$ A $= 2,5$ dozens $\checkmark$ CA	1M, Multiplying by 4 1CA, No. of bread 1A, Dividing by 12 1CA, Number of dozens NPR (4)	L4 F
3.1.4	No. of white bread = $\frac{2}{5} \times 30 \checkmark$ M $= 12 \checkmark$ CA	CA from 3.1.3 1M, Dividing by 5 1M, Ratio concept 1CA, Number of bread (3)	L2 M
3.2.1	$\checkmark$ RT $450^\circ\text{F} \checkmark$ U	1RT, Correct reading 1U, Unit (2)	L2 M
3.2.2	$^\circ\text{C} = (450-32) \div 1,8 \checkmark$ SF $= 418 \div 1,8 \checkmark$ S $= 232,22 \checkmark$ CA	CA from 3.2.1 1SF, Correct substitution 1S, Simplification 1CA, Answer. (3)	L2 M
3.2.3	$\checkmark$ RT Ounces = $\frac{700\text{g}}{28,3495\text{g}} \times 1\text{oz} \checkmark$ C $= 24,6917 \checkmark$ CA Correct statement $\checkmark$ O, the mass can be rounded to the nearest ounces $\checkmark$ J	1RT, Correct mass 1C, Conversion 1CA, 24,69ounces 1O, Opinion 1J, Reasoning. (5)	L4 M
			[22]

	QUESTION 4 [24]		
QUE	SOLUTION	EXPLANATION	L/T
4.1.1	Diameter = 27inch – 24,3inches ✓M = $\frac{2,7 \text{ inches}}{2}$ ✓A = 1,35inches	1M, Subtracting inner diameter 1A, Difference 1M, Dividing by 2 (3)	L4 M
4.1.2	Radius is the half of the diameter of the button wall mirror. ✓✓E	2E, Explanation (2)	L1 M
4.1.3	Radius = $\frac{27\text{inches}}{2}$ ✓M = 13,5inches ✓A	1M, Dividing diameter by 2 1A, Correct radius AO (2)	L2 M
4.1.4	✓SF C = $2 \times 3,142 \times 13,5\text{inches}$ ✓S = 84,834 inches $\times 2,54\text{cm}$ ✓C = 215,48cm ✓CA OR ✓C Radius = $2,54 \times 13,5\text{inches}$ = 34,29cm ✓SF ✓S C = $2 \times 3,142 \times 34,29\text{cm}$ = 215,48cm ✓CA	1SF, Correct substitution 1S, Simplification 1C, Conversion 1CA, Circumference in cm OR 1C, conversion 1SF, Correct Substitution 1S, Simplification 1CA, Circumference in cm (4)	L3 M
4.2.1	12 months ✓✓A	2A, Correct months (2)	L2 F
4.2.1	Sales ✓✓A	2A, Correct source of income (2)	L1 F
4.2.3	Monthly bank fees = $\frac{\text{R1 080}}{12 \text{ months}}$ ✓M = R90 ✓CA	CA from 4.2.1 1M, Dividing by 12months 1CA, Correct amount (2)	L2 F
4.2.4	✓A Rent, the rent stays the same for a long period/and is the type of expense that does not change ✓J	1A, Answer 1J, Reason (2)	L4 F
4.2.5	✓A Percentage = $\frac{\text{R520 500}}{\text{R1 702 420}} \times 100\%$ ✓M = 30,57% ✓CA	1A, Correct total salaries 1M, Percentage concept 1CA, Percentage (3)	L3 F
4.2.6	✓M Time = 9:24+6hrs10min = 15:34 ✓A	1M, Adding correct times 1A, Correct times Accept 3:34 pm AO (2)	L2 M
			[24]
		TOTAL MARKS:	100