KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

# NATIONAL SENIOR CERTIFICATE

## GRADE 10

## MATHEMATICAL LITERACY

## SEPTEMBER 2024

## COMMON TEST

## MARKING GUIDELINE

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**MARKS: 75**

| SYMBOL | EXPLANATION |
|---|---|
| MA | Method with accuracy |
| MCA | Method with consistent accuracy |
| CA | Consistent accuracy |
| A | Accuracy (Answer) |
| C | Conversion |
| S | Simplification |
| RT | Reading from a table/ graph/ diagram |
| SF | Correct substitution in a formula |
| O | Opinion/ reason/deduction/example |
| P | Penalty e.g., for no units, incorrect rounding off, etc. |
| NPR | No penalty for correct rounding |
| NPU | No penalty for omitting unit, but wrong unit is penalised |
| AO | Answer only |

**This marking guideline consists of 5 pages.**

**NOTE:**

- If a learner answers a question TWICE, only mark the FIRST attempt.
- If a learner 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 learner presents extra solution when reading from the graph, table, layout plan and map, then penalise for every extra item presented.
- Rounding is an independent mark.
- General principle of making, if the candidate makes one mistake one mark is deducted.
- A conclusion mark can only be given if relevant calculations precedes it.
- No penalty for rounding (NPR) if the first decimal is correct.

| **QUESTION 1 [16] ANSWER ONLY FULL MARKS** | | | |
|---|---|---|---|
| **Q** | **Solution** | **Explanation** | **T&L** |
| 1.1.1 | It is the rate charged for sanitation at Dundee✓✓O | 2O correct explanation (2) | F L1 E |
| 1.1.2 | R400✓✓R | 2R correct rounding (2) | F L1 E |
| 1.1.3 | Square✓✓A | 2A correct shape (2) | M L1 E |
| 1.1.4 | 10 000cm✓✓C | 2C correct conversion (2) | M L1 E |
| 1.1.5 | Four hundred and forty three rands and ninety six cents✓✓A | 2A correct amount (2) | F L1 M |
| 1.1.6 | 0✓✓A **OR** zero | 2A answer (2) | P L1 M |
| 1.2.1 | Number scale✓✓A **OR** Ratio✓✓A **OR** Numerical✓✓A | 2A answer (2) | MP L1 M |
| 1.2.2 | 1unit/mm/cm of the house plan on paper represents 100 units/mm/cm on the ground/reality.✓✓A | 2A answer (2) | P L1 M |
| | | | **[16]** |

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| QUESTION 2[19 MARKS] | | | |
|---|---|---|---|
| **Q** | **Solution** | **Explanation** | **T&L** |
| 2.1 | Total amount<br>✓RT<br>= R1200 x 3✓MA<br>= R3600 | 1RT correct values<br>1M multiplying correct values<br>(2) | F<br>L2<br>E |
| 2.2 | Total monthly expenses<br>= R5000+R1000+3(R1200)+R1000 +R500+ R160+R1000+R3500+R3000 ✓MA<br>= R18 760✓A | **MCA for the total amount in 2.1**<br>1M adding correct values<br>1A answer<br>(2) | F<br>L2<br>M |
| 2.3 | Fixed expenses is the monthly amount of money the Mthethwa family pays and cannot change. ✓✓O | 2O correct explanation | F<br>L1<br>M |
| 2.4 | Bond repayment on house✓RT<br>School fees✓RT<br>Bank charges✓RT<br>**OR**<br>Insurance/Tax Association contribution✓RT | 1RT for each fixed expenses x 3<br>(3) | F<br>L2<br>M |
| 2.5 | ✓RT<br>=5000: 1000 ✓MA<br>= 5:1✓A | 1RT correct values<br>1M correct arrangement<br>1A answer<br>(3) | F<br>L2<br>M |
| 2.6 | Food you buy depends on the amount of money you have. ✓✓O<br>**OR**<br>It varies✓✓O<br>**OR**<br>Any other valid reason | 2O correct explanation<br>(2) | F<br>L4<br>M |
| 2.7 | ✓RT<br>= $\frac{3000}{500}$ ✓MA<br>= 6✓A<br>The statement is true✓✓O | 1RT correct values<br>1M dividing correct values in a correct order<br>1A answer<br>2O opinion<br>(5) | F<br>L4<br>D |
| | | | **[19]** |

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| QUESTION 3 [22 MARKS] | | | |
|---|---|---|---|
| **Q** | **Solution** | **Explanation** | **T&L** |
| 3.1 | 4 ✓✓A | 2A answer<br>(2) | MP<br>L1<br>E |
| 3.2 | Library ✓✓RT | 2RT answer<br>(2) | MP<br>L1<br>E |
| 3.3 | West ✓✓A | 2A answer<br>(2) | MP<br>L2<br>E |
| 3.4 | P(A) =<br>✓MA<br>$= \frac{1}{4}$ X 100%✓M<br>= 25%✓A | **CA from 3.1**<br>Downloaded from Stanmorephysics.com<br>1MA dividing correct values<br>1A correct events<br>3A correct outcomes<br>(3) | P<br>L2<br>E |
| 3.5 | The statement is correct ✓A<br>The west side is exposed to the sun in the afternoon ✓✓O<br>**OR**<br>These three houses are on the west side, where the sun set. ✓✓O | 1A answer<br>2O correct reason<br>(3) | MP<br>L4<br>M |
| 3.6 | Car don't drive in high speed.✓✓O<br>To avoid traffic along Fifth Street.✓✓O<br>**OR**<br>Drop off and pick up zone✓✓O | 2O correct opinion<br>2O correct opinion<br>(4) | MP<br>L4<br>M |
| 3.7.1 | 1mm: 100mm✓C<br>1:100✓A<br>**OR**<br>0,1cm: 10cm✓C<br>1:100✓A | 1C converting<br>1A answer<br>(2) | M<br>L2<br>M |

| | | | |
|---|---|---|---|
| 3.7.2 | Measured distance<br>=175 mm✓M<br>Actual distance<br>=175 x 100 ✓MA<br>=$\frac{17500mm}{1000}$ ✓C<br>= 17,5m✓A<br>Downloaded from Stanmorephysics.com<br>**OR**<br>Measured distance<br>=17,5 cm✓M<br>Actual distance<br>=17,5 x 100 ✓MA<br>=$\frac{1750cm}{100}$ ✓C<br>= 17,5m✓A | 1M correct measurement of northern side<br><br>1MA multiplying with a correct scale<br>1C converting<br><br>1A simplification<br><br>**Accept 17,4 cm**<br>(4) | M<br>L3<br>M |
| | | | **[22]** |

**QUESTION 4[18 MARKS]**

| Q | Solution | Explanation | T&L |
|---|---|---|---|
| 4.1 | Square ✓✓A | 2A answer<br>(2) | M<br>L1<br>M |
| 4.2 | Number of small boxes<br>✓RT<br>= $\frac{460}{75}$ ✓M<br>= 4✓A | 1RT correct values<br>1M dividing 460 by 100<br><br>1A answer<br>(3) | M<br>L3<br>M |
| 4.3 | Number of small boxes along the length<br>= 6✓A<br>Number of small boxes along the width<br>= $\frac{460}{100}$ ✓MA<br>= 4<br><br>Total number of boxes at the base<br>= 6 x 4✓MCA<br>= 24✓CA<br>The statement is NOT correct✓O | **MCA for the answer in 4.1**<br><br>1A answer<br><br>1M dividing correct values<br><br><br><br>1MCA multiplying correct values<br>1CA answer<br>1O opinion<br>(5) | M<br>L3<br>D |
| 4.4.1 | 1.D✓✓A<br>2.C✓✓A<br>3.B✓✓A<br>4.A✓✓A | 2A correct picture D<br>2A correct picture C<br>2A correct picture B<br>2A correct picture A<br>(8) | MP<br>L1<br>M |
| | | | **[18]** |
| | | | **TOTAL MARKS:75** |

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