



# NATIONAL SENIOR CERTIFICATE

**GRADE 12**

**SEPTEMBER 2025**

## MATHEMATICAL LITERACY P1 MARKING GUIDELINE

**MARKS: 150**

| Symbol     | Explanation  |
|------------|--|
| <b>M</b>   | Method   |
| <b>MA</b>  | Method with accuracy                                       |
| <b>CA</b>  | Consistent accuracy  |
| <b>A</b>   | Accuracy   |
| <b>C</b>   | Conversion   |
| <b>S</b>   | Simplification   |
| <b>RT</b>  | Reading from a table/graph/document/diagram                |
| <b>SF</b>  | Correct substitution in a formula                          |
| <b>O</b>   | Opinion/Explanation  |
| <b>P</b>   | Penalty, e.g., for no units, incorrect rounding off, etc.  |
| <b>R</b>   | Rounding off/Reason  |
| <b>NPR</b> | No penalty for correct rounding minimum two decimal places |
| <b>AO</b>  | Answer only  |
| <b>MCA</b> | Method with constant accuracy                              |

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This marking guideline consists of 9 pages.

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## MARKING GUIDELINE

### NOTE:

- If a candidate answers a question TWICE, only mark the FIRST attempt.
- If a candidate has crossed out an attempt of a question and not redone the question, mark the crossed-out version.
- Consistent accuracy applies in ALL aspects of the marking guideline. Stop marking 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 and table, then penalise for every extra item presented.
- As a general marking principle, if a candidate has incurred one mistake and there is evidence of sound Mathematics thereafter, then that candidate should lose ONE mark only.

**Topics: F – Finance, DH – Data Handling, P – Probability**

| <b>QUESTION 1 [34 MARKS]</b> |   |  |                |
|------------------------------|---|--|----------------|
| <b>Que.</b>                  | <b>Solution</b>   | <b>Explanation</b>   | <b>T&amp;L</b> |
| 1.1.1                        | December ✓✓A  | 2A reading correct month<br>(2)                                      | F<br>L1        |
| 1.1.2                        | Mr Ravenswood ✓✓A   | 2A correct name<br>(2)   | F<br>L1        |
| 1.1.3                        | Costs = R631,70 + R1 399,00 + R243,50 + R243,50 + R64,37<br>+ R68,02 + R21,28 + R94,43 ✓MA<br>= R2 765,80 ✓CA | 1MA Adding correct amounts<br>1CA answer<br>(2)                      | F<br>L1        |
| 1.2.1                        | Cost = R325,50 × 12 ✓MA<br>= R3 906,00 ✓CA  | 1MA multiplying by 12<br>(2)   | F<br>L1        |
| 1.2.2                        | Cost for one tyre in cents = R899,00 × 100 = 89 900 cents ✓✓A   | 2A correct amount<br>(2)   | F<br>L1        |
| 1.2.3                        | R225 : R398 ✓RT<br><br>$\frac{225}{225} : \frac{398}{225}$ ✓M<br><br>1 : 1,77 ✓CA                             | 1RT correct amounts<br><br>1 M division<br>1CA simplification<br>(3) | F<br>L1        |
| 1.3.1                        | Rent ✓✓A<br><br><b>OR</b><br><br>Cell phone contract ✓✓A <b>OR</b> transport ✓✓A <b>OR</b> savings ✓✓A        | 2A correct fixed expense<br><br>(2)                                  | F<br>L1        |

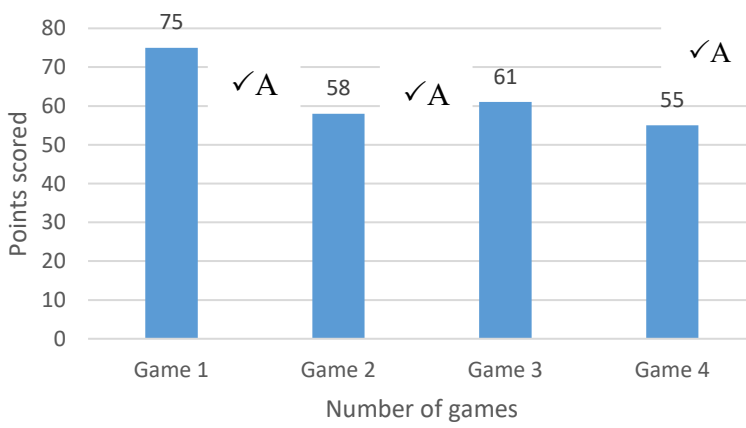
| 1.3.2     | $\begin{aligned} \text{Total Expenses} &= \text{R6 000,00} + \text{R3 500,00} + \text{R2 000,00} + \text{R300,00} + \text{R2 000} \\ &= \text{R15 800,00} \end{aligned}$ <div>✓MA<br/>✓CA</div>  | 1MA for adding correct values<br>1CA simplification<br>(2) | F<br>L1 |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
|-----------|--|--|---------|-----------|---------|----|----|-----------|----|---|----------|------|----|---------|------|----|---|---------|
| 1.3.3     | Deficit ✓✓A  | 2A correct identification<br>(2)                           | F<br>L1 |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| 1.4.1     | IsiZulu ✓✓A  | 2A answer<br>(2)   | D<br>L1 |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| 1.4.2     | <table><thead><tr><th>Response</th><th>Tally</th><th>Frequency</th></tr></thead><tbody><tr><td>English</td><td>                                 ✓A</td><td>45</td></tr><tr><td>Afrikaans</td><td>        ✓A</td><td>7</td></tr><tr><td>IsiXhosa</td><td>                 } ✓A</td><td>23</td></tr><tr><td>IsiZulu</td><td>             } ✓A</td><td>14</td></tr></tbody></table> | Response   | Tally   | Frequency | English | ✓A | 45 | Afrikaans | ✓A | 7 | IsiXhosa | } ✓A | 23 | IsiZulu | } ✓A | 14 | 1 A for English<br>1 A for Afrikaans<br>1 A for IsiXhosa and IsiZulu<br>(3) | D<br>L1 |
| Response  | Tally  | Frequency  |         |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| English   | ✓A   | 45   |         |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| Afrikaans | ✓A   | 7  |         |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| IsiXhosa  | } ✓A   | 23   |         |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| IsiZulu   | } ✓A   | 14   |         |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| 1.4.3     | Probability (IsiXhosa) = 25,8% ✓✓RT<br><b>OR</b><br>$\frac{23}{89}$ ✓RT = 0,26 <b>OR</b> 26% ✓A  | 2RT correct percentage<br>(2)                              | P<br>L1 |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| 1.5.1     | D ✓✓A  | 2 A answer<br>(2)  | F<br>L1 |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| 1.5.2     | C ✓✓A  | 2 A answer<br>(2)  | F<br>L1 |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| 1.5.3     | B ✓✓A  | 2 A answer<br>(2)  | P<br>L1 |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
| 1.5.4     | A ✓✓A  | 2 A answer<br>(2)  | D<br>L1 |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |
|           |  | <b>[34]</b>  |         |           |         |    |    |           |    |   |          |      |    |         |      |    |   |         |

| QUESTION 2 [31 MARKS] |  |   |         |
|-----------------------|--|---|---------|
| Que.                  | Solution   | Explanation   | T&L     |
| 2.1.1                 | Max monthly earnings = R13 766 ✓✓RT  | 2RT Correct<br>monthly earnings<br>(2)  | F<br>L1 |
| 2.1.2                 | Annual earnings = R165 192 ✓✓RT  | 2RT correct annual<br>earnings<br>(2)   | F<br>L1 |
| 2.1.3                 | Annual Tax = $R165\,192 \times \frac{18}{100}$ ✓A<br>= R29 734,56 ✓A<br>= R29 734,56 – (R17 235,00 + R9 444,00 + R3 145) ✓MA<br>= -R89,44 ✓A<br>The employee does not pay any tax because the rebate is<br>larger than the amount of tax. SARS must pay the employee<br>a refund of R89,44 ✓✓J   | CA from 2.1.2<br>1A correct bracket<br>1A simplification<br>1MA subtracting all<br>rebate<br>1A answer<br>2A justification<br>(6)   | F<br>L3 |
| 2.2                   | Monthly salary = $R4\,118,40 \times 100$ ✓MA<br>= R411 840,00 ✓M<br>= $R411\,840,00 \div 12$ ✓MA<br>= R34 320 ✓CA  | 1MA multiplying by<br>100<br>1M simplification<br>1MA dividing by 100<br>1CA answer<br>(4)  | F<br>L2 |
| 2.3.1                 | Cost for 20 laptops               = $R5\,000,00 \times 20$ ✓MA<br>= R100 000,00 ✓A<br>Selling price for 10 laptops = $R6\,000,00 \times 10$<br>= R60 000,00 ✓MA<br>Discount on remaining       = $R60\,000 \times \frac{10}{100}$<br>= R6 000 ✓CA<br>= R60 000,00 – R6 000<br>= R54 000,00 ✓CA<br>Income                               = R60 000,00 + R54 000,00 ✓M<br>= R114 000,00<br>Profit = Income - Expenses<br>= R114 000,00 – R100 000,00 ✓MCA<br>= R14 000,00 ✓CA | 1MA multiplying by<br>20<br>1A simplification<br>1MA simplification<br>1CA simplification<br>1CA discount<br>1M adding correct<br>amounts<br>1MCA subtracting<br>correct values<br>1CA simplification | F<br>L4 |

|       |   |  |         |
|-------|---|--|---------|
|       | <p style="text-align: center;"><b>OR</b></p> <p>Cost for 20 laptops = R5 000,00 × 20 ✓MA<br/>= R100 000,00 ✓A</p> <p>Selling price for 10 laptops = R6 000,00 × 10<br/>= R60 000,00 ✓MA</p> <p>Discount on remaining = R60 000 × <math>\frac{90}{100}</math> ✓M<br/>= R54 000,00 ✓CA</p> <p>Income = R60 000,00 + R54 000,00 ✓M<br/>= R114 000,00</p> <p>Profit = Income - Expenses<br/>= R114 000,00 – R100 000,00 ✓MCA<br/>= R14 000,00 ✓CA</p>   | <p style="text-align: center;"><b>OR</b></p> <p>1MA multiplying by 20<br/>1A simplification<br/>1MA simplification</p> <p>1M multiplication<br/>1CA discount<br/>1M adding correct amounts<br/>1MCA subtracting correct values<br/>1CA simplification<br/>(8)</p>                                  |         |
| 2.3.2 | <p>% profit = <math>\frac{\text{Profit}}{\text{Cost}} \times 100</math></p> <p style="text-align: center;"><math>= \frac{R14\,000,00}{100\,000} \times 100 \checkmark \text{MA}</math></p> <p style="text-align: center;"><math>= 14\% \checkmark \text{CA}</math></p>  | <p><b>CA from 2.3.1</b><br/>1 RT correct value<br/>1MA multiplying by 100<br/>1CA simplification<br/>(3)</p>   | F<br>L3 |
| 2.4   | <p>1 Euro(€) = R19,92<br/>? = R10 000,00</p> <p style="text-align: center;"><math>= \frac{R10\,000,00}{R19,92} \checkmark \text{C}</math></p> <p style="text-align: center;"><math>= € 502,00 \checkmark \text{CA}</math></p> <p style="text-align: center;"><math>= €502 - € 500 \checkmark \text{MA}</math><br/><math>= € 2 \checkmark \text{CA}</math></p> <p>Remaining = R19,92 × € 2 ✓C<br/>= R39,84 = R40 ✓R</p> <p style="text-align: center;"><b>OR</b></p> <p>1 Euro(€) = R19,92<br/>500(€) = R?</p> <p style="text-align: center;"><math>= 500 \checkmark \text{RT} \times 19,92 \checkmark \text{C}</math><br/><math>= 9\,960 \checkmark \text{CA}</math></p> <p>Remaining = R10 000 ✓RT – R9 960 ✓M<br/>= R40 ✓CA</p> | <p>1C conversion<br/>1CA answer<br/>1MA subtracting currencies<br/>1CA simplification<br/>1C conversion<br/>1R rounding</p> <p style="text-align: center;"><b>OR</b></p> <p>1RT correct value<br/>1C conversion<br/>1CA answer<br/>1RT correct value<br/>1M subtraction<br/>1CA answer<br/>(6)</p> | F<br>L2 |
|       |   | [31]   |         |

| QUESTION 3 [28 MARKS] |  |  |         |
|-----------------------|--|--|---------|
| Que.                  | Solution   | Explanation  | T&L     |
| 3.1.1                 | 2022 ✓✓A   | 2A correct year<br>(2)   | D<br>L1 |
| 3.1.2                 | 2 ✓✓A  | 2A answer<br>(2)   | D<br>L1 |
| 3.1.3                 | Difference = 6,883 – 5,424 ✓RT ✓MA<br>= 1,459 thousands <b>OR</b> 1459 ✓CA<br><br><b>OR</b><br><br>Difference = 6 883 – 5 424 ✓RT ✓MA<br>= 1 459 ✓CA   | 1RT reading correct values from the table<br>1MA subtracting correct values<br>1CA answer<br><br>(3)   | D<br>L2 |
| 3.1.4                 | Total number (2023):<br>= 8,860 + 6,765 + 5,821 + 5,689 + 4,742 + 3,871 + 3,338 + 3,274 ✓MA<br>= 42,36 thousand ✓CA<br><br>$\text{P (United Kingdom)} = \frac{5,821 + 5,689 + 4,742}{42,36} \times 100 \times 100 \text{ ✓M}$ $= \frac{16,252}{42,36} \times 100 \text{ ✓M}$ $= 38,37\% \text{ ✓CA}$ | 1MA correct values<br>1CA total<br>1RT correct value<br><br>1M multiplying by 100<br>1CA correct percentage<br><br>(5)   | D<br>L2 |
| 3.1.5                 | Discreet ✓✓A   | 2A answer<br>(2)   | D<br>L1 |
| 3.2.1                 | FET % = 15% + 10% ✓RT ✓MA<br>= 25% ✓A  | 1RT correct %<br>1MA adding correct %<br>1A correct %<br><br>(3)   | D<br>L2 |
| 3.2.2                 | $\text{No of learners} = 780 \times \frac{20}{100} \text{ ✓MA}$ $= 156 \text{ learners ✓CA}$   | 1RT correct total<br>1MA multiplying by 20%<br>1CA correct answer<br><br>(3)   | D<br>L2 |
| 3.2.3                 | $\text{Grade 8} = 780 \times \frac{30}{100} \text{ ✓MA}$ $= 234 \text{ learners ✓A}$<br>$\text{Grade 9} = 780 \times \frac{25}{100} \text{ ✓MA}$ $= 195 \text{ ✓A}$<br>Difference = 234 – 195 ✓MA<br>= 39 learners ✓CA   | 1MA multiplying by 30%<br>1A correct number of grade 8 learners<br><br>1MA multiplying by 25%<br>1A correct number of grade 9 learners<br><br>1MA subtracting correct numbers<br>1CA answer<br><br>(6) | D<br>L3 |
|                       |  | [26]   |         |

| QUESTION 4 [26 MARKS] |  |   |         |
|-----------------------|--|---|---------|
| Que.                  | Solution   | Explanation   | T&L     |
| 4.1.1                 | Developing questions; collecting data; ✓A<br>Organising data; Summarising data; ✓A<br>Representing data graphically; Analyse data ✓A   | 1A 1 <sup>st</sup> two stages<br>1A for 2 <sup>nd</sup> two stages<br>1A for 3 <sup>rd</sup> two stages<br>(3)                                      | D<br>L1 |
| 4.1.2                 | Bar graph, Double bar graph, Histogram, Stacked bar graph, Scatter Plot, Line graph ✓✓✓A   | 3A any three correct graphs<br>(3)  | D<br>L2 |
| 4.2.1                 | 2022/23 fare: R14,50<br>2023/24 fare: R15,00<br>✓ RT<br>% increase = $\frac{R15,00 - R14,50}{R14,50} \times 100$ ✓MA<br>$= \frac{0,5}{14,5} \times 100$<br>$= 3,45\%$ ✓CA  | 1RT correct values<br>1MA multiplying by 100<br>1M dividing by R14,50<br>1CA answer<br>(4)  | F<br>L2 |
| 4.2.2                 | ✓A ✓MA<br>5 km × R10,00 = R50,00 ✓A<br>5 km × R12,50 = R62,00<br>5 km × R15,00 = R75,00<br>9,1 km × R17,00 = <u>R154,70</u><br>$= R341,70$ ✓CA × 1,15 ✓M<br>$= R393,53$ ✓CA<br>Nancy's statement is correct ✓J           | 1A for max distances<br>1MA multiplying by tariff<br>1A 4 amounts<br>1CA total before VAT<br>1M VAT<br>1CA VAT inclusive<br>1J justification<br>(7) | F<br>L3 |
| 4.3.1                 | 36,5 ✓✓A   | 2A correct value<br>(2)   | D<br>L2 |
| 4.3.2                 | 20 ✓✓A   | 2A correct age<br>(2)   | D<br>L2 |
| 4.4.                  | BMI = $\frac{\text{mass(kg)}}{(\text{Height(m)})^2}$<br>$= \frac{75 \text{ kg}}{(1,71\text{m})^2}$ ✓C<br>$= \frac{75 \text{ kg}}{2,9241 \text{ m}^2}$ ✓S<br>$= 25,6489 \text{ kg/m}^2$ ✓CA<br>$= 25,6 \text{ kg/m}^2$ ✓R | 1 SF correct substituting in a formula<br>1 C conversion<br><br>1S squaring 1,71<br>1CA simplification<br>1R rounding<br>(5)                        | D<br>L3 |
|                       |  | [26]  |         |

| QUESTION 5 [31 MARKS] |   |   |               |        |    |        |    |        |    |        |    |   |         |
|-----------------------|---|---|---------------|--------|----|--------|----|--------|----|--------|----|---|---------|
| Que.                  | Solution  | Explanation   | T&L           |        |    |        |    |        |    |        |    |   |         |
| 5.1                   | <p>Deposit = <math>R12\ 000 \times \frac{25}{100}</math> ✓MA</p> <p>= R3 000,00 ✓A</p> <p>Loan = <math>R12\ 000,00 - R3\ 000,00</math></p> <p>= R9 000 ✓A</p> <p>Interest charged = <math>\frac{15}{100} \times R9\ 000 \times 3\ \text{years}</math> ✓MA</p> <p>= <math>R1\ 350 \times 3</math></p> <p>= R4 050,00 ✓CA</p> <p>Total repayment amount = <math>R9\ 000,00 + R4\ 050</math></p> <p>= R13 050 ✓A</p> <p>Monthly instalment = <math>R13\ 050,00 \div 36</math> ✓MA</p> <p>= R362,25 ✓CA</p> <p style="text-align: center;"><b>OR</b></p> <p>Loan = <math>100\% - 25\% = 75\%</math> ✓MA</p> <p>= <math>\frac{75}{100} \times R12\ 000</math> ✓M = R9 000 ✓A</p> <p>Interest charged = <math>\frac{15}{100} \times R9\ 000 \times 3\ \text{years}</math> ✓MA</p> <p>= <math>R1\ 350 \times 3</math></p> <p>= R4 050,00 ✓CA</p> <p>Total repayment amount = <math>R9\ 000,00 + R4\ 050</math></p> <p>= R13 050 ✓A</p> <p>Monthly instalment = <math>R13\ 050,00 \div 36</math> ✓MA</p> <p>= R362,25 ✓CA</p> | <p>1MA multiplying by 25%</p> <p>1A simplification</p> <p>1A loan</p> <p>1MA multiplying by 3 years</p> <p>1CA interest</p> <p>1A total amount</p> <p>1MA dividing by 36</p> <p>1CA simplification</p> <p style="text-align: center;"><b>OR</b></p> <p>1MA subtraction</p> <p>1M multiplication</p> <p>1A loan</p> <p>1MA multiplying by 3 years</p> <p>1CA interest</p> <p>1A total amount</p> <p>1MA dividing by 36</p> <p>1CA simplification</p> <p style="text-align: right;">(8)</p> | F<br>L4       |        |    |        |    |        |    |        |    |   |         |
| 5.2.1                 | <p style="text-align: center;">South African Team Netball Results ✓A</p>  <table><tr><th>Game</th><th>Points scored</th></tr><tr><td>Game 1</td><td>75</td></tr><tr><td>Game 2</td><td>58</td></tr><tr><td>Game 3</td><td>61</td></tr><tr><td>Game 4</td><td>55</td></tr></table>   | Game  | Points scored | Game 1 | 75 | Game 2 | 58 | Game 3 | 61 | Game 4 | 55 | <p>1A title</p> <p>3A for game 1,2 and 4 bars</p> <p style="text-align: right;">(4)</p> | D<br>L4 |
| Game                  | Points scored   |   |               |        |    |        |    |        |    |        |    |   |         |
| Game 1                | 75  |   |               |        |    |        |    |        |    |        |    |   |         |
| Game 2                | 58  |   |               |        |    |        |    |        |    |        |    |   |         |
| Game 3                | 61  |   |               |        |    |        |    |        |    |        |    |   |         |
| Game 4                | 55  |   |               |        |    |        |    |        |    |        |    |   |         |

|       |  |   |         |
|-------|--|---|---------|
| 5.2.2 | <p>Mean = <math>\frac{55 + 58 + 61 + 75}{4}</math> ✓RT<br/> <math>= \frac{249}{4}</math><br/> <math>= 62,25</math> ✓CA</p> <p>Median: 55 58 61 75 ✓M<br/> <math>= \frac{58 + 61}{2}</math> ✓M<br/> <math>= 59,5</math> ✓A</p> <p>Difference = <math>62,25 - 59,5</math> ✓M<br/> <math>= 2,75</math><br/> The coach is correct ✓J</p>   | <p>1RT correct values<br/> 1M dividing by 4</p> <p>1CA simplification</p> <p>1M arranging in ascending or descending order</p> <p>1M correct values<br/> 1A simplification</p> <p>1M subtracting 2 values<br/> 1J explanation</p> <p>(8)</p>                    | D<br>L4 |
| 5.3.1 | Credit card ✓✓A  | 2A answer<br>(2)  | F<br>L2 |
| 5.3.2 | <p>Total cost of comfort luxury = <math>R72,99 \times 2</math> ✓M =<br/> R145,98 ✓A</p> <p>Discount R45,98 ✓RT</p> <p>Percentage discount: <math>\frac{45,98}{145,98} \times 100</math> ✓M = 31,50% ✓A</p>   | <p>1 M multiply by 2<br/> 1 A total amount<br/> 1RT correct discount<br/> 1 M multiply by 100<br/> 1 A answer</p> <p>(5)</p>  | F<br>L2 |
| 5.3.3 | <p>15% = R54,97<br/> 115% = ?<br/> VAT inclusive = <math>\frac{115}{15} \times 54,97</math> ✓M<br/> <math>= 421,44</math> ✓CA</p> <p>Amount paid = <math>R421,44 - R63,50</math> ✓MA<br/> <math>= R357,94</math> ✓CA</p> <p style="text-align: center;"><b>OR</b></p> <p>Total amount = <math>R1,48 + R72,99 + R72,99 + R25,99 + R24,99 + R57,98 + R82,99 + R34,99 + R105,00 - (R11,98 + R45,98)</math> ✓MA<br/> <math>= R421,44</math> ✓CA</p> <p>Amount paid = <math>R421,44 - R63,50</math> ✓MA<br/> <math>= R357,94</math> ✓CA</p> | <p>1M multiplication<br/> 1 CA answer</p> <p>1MA subtracting correct amounts<br/> 1CA answer</p> <p style="text-align: center;"><b>OR</b></p> <p>1MA adding correct values<br/> 1 CA answer<br/> 1MA subtracting correct amounts<br/> 1CA answer</p> <p>(4)</p> | F<br>L1 |
| 5.4   | <p>Real increment = <math>5,5\% - 3,0\%</math> ✓MA<br/> <math>= 2,5\%</math> ✓A</p>  | <p>1MA subtracting correct %<br/> 1A answer</p> <p>(2)</p>  | F<br>L4 |
|       |  | [33]  |         |
|       |  |   |         |
|       |  | <b>TOTAL: 150</b>   |         |