|  |  |  |  |
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| Year 8 | | *Equations* | Non Calculator  Section |
| **Skills and Knowledge Assessed:**   * Solve simple linear equations (ACMN A179) * Solve linear equations using algebraic and graphical techniques. Verify solutions by substitution (ACMNA194) | | | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Answer all questions in the spaces provided on this test paper by:  *Writing the answer in the box provided.*  or  *Shading in the bubble for the correct answer from the four choices provided.*  Show any working out on the test paper.Calculators are **not** allowed. | | | |
|  | What number is missing from the sentence?    ?  4 16 24 240 | | |
|  | Give the solution to: | | |
|  | Which is the correct solution to: | | |
|  | Give the solution to: | | |
|  | Solve | | |
|  | What number is missing from the sentence?  ? | | |
|  | What number is missing from the sentence?  ?    1 4 5 6 | | |
|  | Which line in the solution to the equation  contains an error?    Line 1  Line 2  Line 3  Line 4  Line 1 Line 2 Line 3 Line 4 | | |
|  | Solve | | |
|  | Test the possible solutions below to find the correct solution to the equation : | | |

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| Year 8 | | *Equations* | Calculator Allowed  Short Answer  Section |
|  | | | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Answer all questions in the spaces provided on this test paper by:  *Writing the answer in the box provided.*  or  *Shading in the bubble for the correct answer from the four choices provided.*  Show any working out on this test paper. Calculators are allowed. | | | |
|  | Which calculation could be used to find the solution to the equation  ? | | |
|  | Give the solution to: | | |
|  | Which is the correct solution to: | | |
|  | Solve: | | |
|  | Solve: | | |
|  | Solve the equation  . | | |
|  | Which is the correct solution to the equation: | | |
|  | Which line in the solution to the equation  contains an error?    Line 1  Line 2  Line 3  Line 4  Line 1 Line 2 Line 3 Line 4 | | |
|  | Which is the solution to  ? | | |
|  | Solve | | |

|  |  |  |
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| Year  8 | *Equations* | Calculator Allowed  Longer Answer  Section |
|  | | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| ***Write all working and answers in the spaces provided on this test paper.***  ***Marks may not be awarded if working out and/or answers are not clear.***  ***Marks allocated are shown beside each question.***  ***Calculators are allowed.*** | | |

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| --- | --- | --- | --- | --- | --- | --- |
| 1. | Solve the equations below, showing all steps of working, regardless of the method used. | | | | | |
|  | |  | **Marks** |  |  | **Marks** |
| a) | |  | **2** | b) |  | **2** |
| c)` | |  | **2** | d) |  | **2** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2. | Solve the equations below, showing all steps of working, regardless of the method used. | | | | | |
|  | |  | **Marks** |  |  | **Marks** |
| a) | |  | 3 | b) |  | 3 |
| c) | |  | **3** | d) |  | **3** |

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| Year 8 | | *Equations* | Non Calculator  Section |
| ANSWERS | | | |
| No. | WORKING | | ANSWER |
|  |  | | 3rd answer |
|  |  | |  |
|  |  | | 2nd answer |
|  |  | |  |
|  |  | |  |
|  |  | | 3rd answer |
|  |  | | 2nd answer |
|  |  | | 1st answer |
|  |  | | 4th answer |
|  |  | | 3rd answer |

|  |  |  |  |  |
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| Year 8 | | *Equations* | Calculator Allowed  Short Answer  Section | |
| ANSWERS | | | | |
| No. | WORKING | | | ANSWER |
|  |  | | | 2nd answer |
|  |  | | |  |
|  |  | | | 4th answer |
|  |  | | |  |
|  |  | | |  |
|  |  | | | 1st answer |
|  |  | | | 4th answer |
|  | Line 3 should be | | | 3rd answer |
|  |  | | | 1st answer |
|  |  | | |  |

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| Year 8 | *Equations* | Calculator Allowed  Longer Answer  Section |
| ANSWERS | | |

| 1. |  | **Marks** |  |  | **Marks** |
| --- | --- | --- | --- | --- | --- |
| a) |  | **2 marks for correct answer with reasoning.**  **1 mark for an attempt with some correct reasoning** | b) | OR | **2 marks for correct answer with reasoning.**  **1 mark for an attempt with some correct reasoning** |
| c)` |  | **2 marks for correct answer with reasoning.**  **1 mark for an attempt with some correct reasoning** | d) |  | **2 marks for correct answer with reasoning.**  **1 mark for an attempt with some correct reasoning** |

| 2. |  | **Marks** |  |  | **Marks** |
| --- | --- | --- | --- | --- | --- |
| a) |  | **3 marks for correct answer with reasoning.**  **2 marks for basically correct working with a single error**  **1 mark for an attempt with some correct reasoning** | b) |  | **3 marks for correct answer with reasoning.**  **2 marks for basically correct working with a single error**  **1 mark for an attempt with some correct reasoning** |
| c) |  | **3 marks for correct answer with reasoning.**  **2 marks for basically correct working with a single error**  **1 mark for an attempt with some correct reasoning** | d) |  | **3 marks for correct answer with reasoning.**  **2 marks for basically correct working with a single error**  **1 mark for an attempt with some correct reasoning** |