|  |  |  |  |
| --- | --- | --- | --- |
| 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?  ?    5 8 32 240 | | |
|  | Give the solution to:  *a =* | | |
|  | Which is the correct solution to: | | |
|  | Give the solution to:  *w =* | | |
|  | Solve:  *x =* | | |
|  | What number is missing from the sentence?  ? | | |
|  | What number is missing from the sentence?  ?    7 8 10 13 | | |
|  | 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 the test paper. Calculators are allowed.* | | | |
|  | Which calculation could be used to find the solution to the equation  ? | | |
|  | Give the solution to:  p = | | |
|  | Which is the correct solution to: | | |
|  | Solve:  v = | | |
|  | Solve:  m = | | |
|  | 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  m = | | |

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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** |

Equations

ANSWERS

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| --- |
| Non Calculator Section ( 1 mark each) |

|  |  |  |
| --- | --- | --- |
| Q no |  | Answer |
|  | Missing number = 20 – 12 = 8 | 2nd Answer |
|  |  |  |
|  |  | 1st Answer |
|  |  |  |
|  |  |  |
|  |  | 3rd Answer |
|  |  | 1st Answer |
|  | First line should be | 1st Answer |
|  |  | 3rd Answer |
|  |  | 2nd Answer |

|  |
| --- |
| Calculator Allowed Short Answer Section ( 1 mark each) |

|  |  |  |
| --- | --- | --- |
| Q no |  | Answer |
|  |  | 4th Answer |
|  |  | 6.1 |
|  |  | 3rd Answer |
|  |  |  |
|  |  |  |
|  |  | 3rd Answer |
|  |  | 4th Answer |
|  | Line 2 should be | 2nd Answer |
|  |  | 3rd Answer |
|  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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** |