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| Year  8 | | *Linear 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.** | | | |
|  | What number is missing from the sentence?    ?  3 16 29 192 | | |
|  | Give the solution to:  *m =* | | |
|  | Which is the correct solution to: | | |
|  | Give the solution to:  *r =* | | |
|  | What number is missing from the sentence?  ? | | |
|  | What number is missing from the sentence?  ?    1 3 5 9 | | |
|  | 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 | | |
|  | Test the possible solutions below to find the correct solution to the equation: | | |
|  | Which number below could not be used to complete the sentence?  ?    1 2 3 4 | | |
|  | Write two numbers which could be used to make this sentence true.  or  ? | | |
|  | Use the formula  to find the value of  , when ,  and . | | |

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| Year  8 | | *Linear 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:  *m =* | | |
|  | Which is the correct solution to: | | |
|  | Give the solution to:    *y =* | | |
|  | 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 | | |
|  | The graph of the solution to  is :    1 4     1. 4     4 7      4 7 | | |
|  | Which is the solution to  ? | | |
|  | Use the formula  to find the value of  , when  ,  and  . | | |
|  | The formula  Is used to convert between temperatures in degrees Celsius (C) and degrees Fahrenheit (F). Find the Farenheit equivalent of 40o Celsius.  40o C = oF | | |

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| Year  8 | *Linear 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** |
| e) | |  | **2** | f) |  | **2** |

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

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| Year  8 | *Linear Equations* |

ANSWERS

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| Non Calculator Section |

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|  | 16 |
|  |  |
|  |  |
|  |  |
|  |  |
|  | 9 |
|  | Line 3 |
|  |  |
|  | 1 |
|  | Any 2 numbers less than 1 |
|  |  |

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| Calculator Allowed Section |

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| --- | --- |
|  |  |
|  |  |
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|  |  |
|  | Line 4 |
|  | The last one |
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| Calculator Allowed  Longer Answer  Section | | | | | |
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| **1.** |  | **Marks** |  |  | **Marks** |
| a) |  | **2** | b) |  | **2** |
| c) |  | **2** | d) |  | **2** |
| e) |  | **2** | f) |  | **2** |

| 2. |  | **Marks** |  |  | **Marks** |
| --- | --- | --- | --- | --- | --- |
| a) |  | 3 | b) |  | 3 |