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| *School Name*  *Mathematics Test 2017* | | | |
| 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. | | | |
|  | Which is the correct solution to: | | |
|  | Give the solution to: | | |
|  | What number is missing from the sentence?    ?  2 10 30 200 | | |
|  | Give the solution to: | | |
|  | Solve | | |
|  | What number is missing from the sentence?  ? | | |
|  | What number is missing from the sentence?  ?    5 7 8 60 | | |
|  | 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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| *School Name*  *Mathematics Test 2017* | | | |
| 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. | | | |
|  | Give the solution to: | | |
|  | Which calculation could be used to find the solution to the equation  ? | | |
|  | 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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| *School Name*  *Mathematics Test 2017* | | | | |
| Year 8 | | *Equations* | Longer Answer Section | |
| Calculator Allowed | | | 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.*** | | | | |
|  | | | | **Marks** |
|  | Solve the equations below, showing all steps of working, regardless of the method used. | | |  |
|  | (a)  ……………………………………………………………………………………..  ……………………………………………………………………………………..  …………………………………………………………………………………….. | | | **2** |
|  | (b)  ……………………………………………………………………………………..  ……………………………………………………………………………………..  …………………………………………………………………………………….. | | | **2** |
|  | (c)  ……………………………………………………………………………………..  ……………………………………………………………………………………..  …………………………………………………………………………………….. | | | **2** |
|  | (d)  ……………………………………………………………………………………..  ……………………………………………………………………………………..  …………………………………………………………………………………….. | | | **2** |
|  | Solve the equations below, showing all steps of working, regardless of the method used. | | |  |
|  | (a)  ……………………………………………………………………………………..  ……………………………………………………………………………………..  ……………………………………………………………………………………..  …………………………………………………………………………………….. | | | **3** |
|  | (b)  ……………………………………………………………………………………..  ……………………………………………………………………………………..  ……………………………………………………………………………………..  …………………………………………………………………………………….. | | | **3** |
|  | (c)  ……………………………………………………………………………………..  ……………………………………………………………………………………..  ……………………………………………………………………………………..  …………………………………………………………………………………….. | | | **3** |
|  | (d)  ……………………………………………………………………………………..  ……………………………………………………………………………………..  ……………………………………………………………………………………..  …………………………………………………………………………………….. | | | **3** |

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| *School Name*  *Mathematics Test 2017* | | |
| Year 8 | *Equations* | Non Calculator Section |

ANSWERS

| Question | Working and Answer |
| --- | --- |
|  | **1st Answer** |
|  |  |
|  | **3rd Answer** |
|  |  |
|  |  |
|  | **2nd Answer** |
|  | **3rd Answer** |
|  | Line 4 should be  **4th Answer** |
|  | **4th Answer** |
|  | **2nd Answer** |

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| *School Name*  *Mathematics Test 2017* | | |
| Year 8 | *Equations* | Calculator Allowed  Short Answer  Section |

ANSWERS

|  |  |
| --- | --- |
| Question | Working and Answer |
|  |  |
|  | **4th Answer** |
|  | **2nd Answer** |
|  |  |
|  |  |
|  | **1st Answer** |
|  | **3rd Answer** |
|  | Line 1 should be  **1st Answer** |
|  |  |
|  |  |

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| *School Name*  *Mathematics Test 2017* | | |
| Year 8 | *Equations* | Calculator Allowed  Longer Answer  Section |

ANSWERS

| Question | Working and Answer | Marks |
| --- | --- | --- |
| 1. | (a) | 2 marks for correct answer with working  1 mark for attempt that shows some progress toward answer, or for answer without working |
|  | (b) | 2 marks for correct answer with working  1 mark for attempt that shows some progress toward answer, or for answer without working |
|  | (c) | 2 marks for correct answer with working  1 mark for attempt that shows some progress toward answer, or for answer without working |
|  | (d) | 2 marks for correct answer with working  1 mark for attempt that shows some progress toward answer, or for answer without working |
| 2. | (a) | 3 marks for correct answer with working.  2 marks for mostly correct working with a minor error.  1 mark for attempt that shows some progress toward answer, or answer without working. |
|  | (b) | 3 marks for correct answer with working.  2 marks for mostly correct working with a minor error.  1 mark for attempt that shows some progress toward answer, or answer without working. |
|  | (c) | 3 marks for correct answer with working.  2 marks for mostly correct working with a minor error.  1 mark for attempt that shows some progress toward answer, or answer without working. |
|  | (d) | 3 marks for correct answer with working.  2 marks for mostly correct working with a minor error.  1 mark for attempt that shows some progress toward answer, or answer without working. |