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| Year  9 | | Mathematics Test  Basic Algebra Skills | | Non Calculator |
| Short Answer Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this test paper. | | | |
| 1. | Simplify  .......................................................................................................................................................... | | | |
| 2. | Simplify  ......................................................................................................................................................... | | | |
| 3. | Simplify  .......................................................................................................................................................... | | | |
| 4. | Simplify  .......................................................................................................................................................... | | | |
| 5. | Simplify completely:  .......................................................................................................................................................... | | | |
| 6. | If , what is the value of ?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 7. | If , what is the value of  ?  .........................................................................................................................................................  ......................................................................................................................................................... | | | |
| 8. | Simplify completely:  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 9. | Simplify .  .......................................................................................................................................................... | | | |
| 10. | Expand  .......................................................................................................................................................... | | | |
| 11. | Expand  .......................................................................................................................................................... | | | |
| 12. | Expand and simplify  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 13. | Expand and simplify  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 14. | Simplify  .......................................................................................................................................................... | | | |
| 15. | Simplify  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 16. | Simplify  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 17. | Factorise  .......................................................................................................................................................... | | | |
| 18. | Factorise  .......................................................................................................................................................... | | | |
| 19. | Write an algebraic expression for :  **“add twice *y* to *x* and divide the result by 3**”  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 20. | Solve the equation:    ..........................................................................................................................................................    .......................................................................................................................................................... | | | |

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| Year  9 | | Mathematics Test  Basic Algebra Skills | | Calculator Allowed |
| Multiple Choice Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Mark all your answers on the accompanying multiple choice answer sheet, not on this test paper. You may do any working out on this test paper. Calculators are allowed for this section. | | | |
| 1. | A.  B.  C.  D. | | | |
| 2. | A.  B.  C.  D. | | | |
| 3. | A.  B.  C.  D. | | | |
| 4. | A.  B.  C.  D. | | | |
| 5. | Which of the following is not equal to  A.  B.  C.  D. | | | |
| 6. | A.  B.  C.  D. | | | |
| 7. | A.  B.  C.  D. | | | |
| 8. | Which of the following does not simplify to  A.  B.  C.  D. | | | |
| 9. | A.  B.  C.  D. | | | |
| 10. | When  A.  B. -8 C. 8 D. | | | |
| 11. | The formula to convert temperatures between Celsius and Farenhiet is .  When the temperature is 95o Farenheit, the temperature in Celsius is:  A. 35o B. 71o C. 85o D. 139o | | | |
| 12. | The coefficient of *a*3 in  is:  A. 3 B. 4 C. 6 D. *b* | | | |
| 13. | The solution to  is:  A.  B.  C.  D. | | | |
| 14. | When  then *a* =:  A. 8 B. 12 C. 16 D. 20 | | | |
| 15. | A.  B.  C.  D. | | | |
| 16. | Which of the following is not equal to  A.  B.  C.  D. | | | |
| 17. | The table was completed using the rule .  The missing value is:  A. -1 B. 0 C. 1 D. 10 | | | |
| 18. | The statement “add 2 to *x* and square the result” would be written as:  A.  B.  C.  D. | | | |

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| Year  9 | Mathematics Test  Basic Algebra Skills | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Multiple Choice Answer Sheet | |

Completely fill the response oval representing the most correct answer.

1. A B C D

2. A B C D

3. A B C D

4. A B C D

5. A B C D

6. A B C D

7. A B C D

8. A B C D

9. A B C D

10. A B C D

11. A B C D

12. A B C D

13. A B C D

14. A B C D

15. A B C D

16. A B C D

17. A B C D

18. A B C D

|  |  |
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| Year  10 | Mathematics Test  Basic Algebra Skills |
| Answer Sheet |

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| --- | --- |
| Short Answer | |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |

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| Multiple Choice | |
| 1 | B |
| 2 | A |
| 3 | A |
| 4 | C |
| 5 | B |
| 6 | C |
| 7 | D |
| 8 | A |
| 9 | D |
| 10 | B |
| 11 | A |
| 12 | C |
| 13 | C |
| 14 | C |
| 15 | D |
| 16 | B |
| 17 | C |
| 18 | D |