|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year  10 | | Non-Linear Equations Practice Test | | Non Calculator |
| Short Answer Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this Practice Test paper. | | | |
| 1. | Solve  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 2. | Solve  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 3. | Solve  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 4. | Solve  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 5. | Solve  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 6. | Solve  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 7. | Give the exact solutions to .  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 8. | Give the solutions to , correct to one decimal place.  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 9. | Use the table below for the equation  to estimate the solution to .     |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | 4 | 5 | 6 | 7 | 8 | 9 | |  | 2.07 | 2.49 | 2.99 | 3.58 | 4.30 | 5.16 |   ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 10. | Jasmine correctly uses the graph below to find the solution to a quadratic equation.  What was the equation?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year  10 | | Non-Linear Equations Practice Test | | Calculator |
| Multiple Choice Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Mark all your answers on the accompanying multiple choice answer sheet, not on this Practice Test paper. You may do any working out on this Practice Test paper. Calculators are allowed for this section. | | | |
| 1. | The constant term in the expression  is:  A.  B. 1 C. 5 D. 4 | | | |
| 2. | The coefficient of  in the expression  is:  A. 4 B. 3 C. -5 D. 5 | | | |
| 3. | The solutions to  are:  A.  B.  C.  D. | | | |
| 4. | The solutions to  are:  A.  B.  C.  D. | | | |
| 5. | The solutions to  are:  A.  B.  C.  D. | | | |
| 6. | The solutions to  are:  A.  B.  C.  D. | | | |
| 7. | The solutions to  are:  A.  B.  C.  D. | | | |
| 8. | The solutions to  are:  A.  B.  C.  D. | | | |
| 9. | The solutions to  are:  A.  B.  C.  D. | | | |
| 10. | has solutions:  A.  B.  C.  D. | | | |
| 11. | has solutions:  A.  B.  C.  D. | | | |
| 12. | The sketch of  is shown.  What are the solutions to  ?  A.  B.  C.  D. | | | |
| 13. | The sketch of  is shown.  Which is not a solution to  ?  A.  B.  C.  D. | | | |
| 14. | Candice used the table below for the equation  to estimate the solution to .     |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 | |  | 15.6 | 17.4 | 19.4 | 21.7 | 24.2 | 27 |   Which is the best solution (correct to one decimal place) to .  A.  B.  C.  D. | | | |

Non-Linear Equations Practice Test

Multiple Choice Section

Answer Sheet

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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