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| Year  9 | | Simultaneous Equations Practice Test | | Non Calculator |
| Short Answer Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this Practice Test paper. | | | |
|  | Questions 1 – 3 refer to the number plane below. | | | |
| 1. | What is the point of intersection of the lines  and ?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 2. | The equation of the horizontal line is given as . What is the value of *a*?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 3. | What is the point of intersection of the lines  and ?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 4. | Solve simultaneously  ..........................................................................................................................................................  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 5. | Solve simultaneously  ..........................................................................................................................................................  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
|  | Questions 6 and 7 refer to the graph of . | | | |
| 6. | A table of values for  has been started below. Complete the table.     |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | *x* | -1 | 0 | 1 | 2 | 3 | | *y* | 5 | 4 |  |  |  | | | | |
| 7. | Find the point of intersection of  and .  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |

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| Year  9 | | Simultaneous 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. | Solve simultaneously  A.  B.  C.  D. | | | |
| 2. | What are the coordinates of the point P?  A. (-2, 7)  B. (7, -2)  C. (-7, 2)  D. (2, -7) | | | |
| 3. | Mareike is trying to solve the equations  and  , but has made a mistake in her working. Which line does the mistake occur?     1. Line 1   B. Line 2  C. Line 3  D. Line 4 | | | |
|  | Questions 4 and 5 refer to the number plane.  The number plane shows the lines ,  and  and their points of intersection O, P and Q. | | | |
| 4. | What are the coordinates of the point P?  A. (0, 0)  B. (4, -2)  C. (4, 2)  D. (2, 4) | | | |
| 5. | What are the coordinates of the point Q?  A. (0, 0)  B. (3, 2)  C. (-1, 6)  D. (-3, -14) | | | |

Simultaneous Equations

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

|  |  |  |  |  |
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| Year  9 | | Simultaneous Equations Practice Test | | Calculator |
| Longer Questions | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this Practice Test paper.  Calculators are allowed for this section. | | | |
| 1. | (a) (2 marks) Complete the table below for the lines whose equations are  and   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | -1 | 1 | 2 | 3 | |  |  |  |  |  | |  |  |  |  |  |   (b) (2 marks) Draw the graph of the two lines.  (c) (1 mark) Write the co-ordinates of the point of intersection of the lines. \_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| 2. | 1. (2 marks) Solve simultaneously  and  .   ...................................................................................................................................  ...................................................................................................................................  ...................................................................................................................................   1. (2 marks) Solve simultaneously  and  . .   ...................................................................................................................................  ...................................................................................................................................  ...................................................................................................................................   1. (2 marks) Solve simultaneously  and   ...................................................................................................................................  ...................................................................................................................................  ...................................................................................................................................   1. (3 marks) Kim and Kath buy some plants at a nursery. Kath buys 5 roses and 4 camelias for $132 and Kim buys 3 roses and 2 camelias for $76. 2. Write an equation for each of Kath and Kims purchases using *r* for the cost of a rose and *c* for the cost of a camellia.   ...................................................................................................................................  .......................................................................................................................   1. Solve the equations simultaneously to find the cost of a rose and the cost of a camellia.   ...................................................................................................................................  ....................................................................................................................... | | | |