|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year  9 | | Mathematics Test  Basic Geometry | | Non Calculator |
| Short Answer Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this test paper. | | | |
| 1. | What order of rotational symmetry does the design shown have?    ............................................................................ | | | |
| 2. | Measure the angle PQR to the nearest degree.  ..............................................................................    .............................................................................. | | | |
| 3. | Name the solid that could be formed from the net shown.    .........................................................................  ........................................................................... | | | |
| 4. | Sketch the image of the polygon *EFGH* after a reflection in the line *KL*. | | | |
| 5. | What is the value of *x* in the diagram?  ....................................................................  ....................................................................    ...................................................................  ................................................................... | | | |
| 6. | What is the size of  ...................................................................  ....................................................................    ...................................................................  .................................................................... | | | |
| 7. | Find the value of *m*.  .........................................................................  ..........................................................................    .........................................................................  .......................................................................... | | | |
| 8. | What is the size of  ......................................................................  .....................................................................    .....................................................................  ..................................................................... | | | |
| 9. | Use a compass and rule to draw the perpendicular bisectors of *AB* and *BC*. Label the point where they intersect as *D*. | | | |
| 10. | The quadrilateral shown is a rectangle.  What is the value of *w*?  ....................................................................  ....................................................................    ................................................................... | | | |
| 11. | The intervals *AB*, *CD* and *EF* are parallel.    What is the size of  ?  ....................................................................  ....................................................................    ................................................................... | | | |
| 12. | What is the size of  ......................................................................  .....................................................................    .....................................................................  ..................................................................... | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year  9 | | Mathematics Test  Basic Geometry | | Non Calculator |
| 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. | Pentominos are shapes made from 5 squares. Which of the pentominos shown has both point symmetry and line symmetry?  A B. C. D. | | | |
| 2. | Which polygon has both parallel sides and perpendicular sides?  A. B. C. D. | | | |
| 3. | Which is not true about the solid shown?  A. It has 4 faces.  B. It has 9 edges.  C. It has 6 vertices  D. It is a triangular prism. | | | |
| 4. | Which transformation was applied to *PQRST* to produce the image *P’Q’R’S’T’*?  A. An enlargement.  B. A reflection.  C. A rotation.  D. A translation. | | | |
| 5. | The angle sum of a quadrilateral is :  A. 90o B. 180o C. 270o D. 360o | | | |
| 6. | Which diagram includes a pair of vertically opposite angles?  A. B.  C. D. | | | |
| 7. | The intervals *AB* and *CD* are parallel.    Which is true?  A.  B.  C.  D. | | | |
| 8. | What is the value of *y* in the diagram?  A. 18o  B. 42o  C. 54o  D. 126o | | | |
| 9. | *f =* ?  A. 18o  B. 42o  C. 54o  D. 126o | | | |
| 10. | *c* = ?  A. 28o  B. 56o  C. 62o  D. 124o | | | |
| 11. | In the quadrilateral ABCD, .  What is the size of .  A. 83o  B. 97o  C. 166o  D. 194o | | | |
| 12. | The size of the interior angle in a regular a pentagon is:  A. 36o B. 72o C. 90o D. 108o | | | |
| 13. | A quadrilateral has two pairs of opposite sides equal, and diagonals which are unequal. The quadrilateral must be:  A. a parallelogram.  B. a rectangle.  C. a rhombus.  D. a square. | | | |
| 14. | The figure shows a regular octagon with an exterior angle  drawn.  What is the size of the exterior angle?  A. 35o  B. 45o  C. 55o  D. 60o | | | |

|  |  |  |
| --- | --- | --- |
| Year  9 | Mathematics Test  Basic Geometry | 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

|  |  |
| --- | --- |
|  | Mathematics Test  Basic Geometry |
| Answer Sheet |

|  |  |
| --- | --- |
| Short Answer | |
| 1 | Order 6 |
| 2 |  |
| 3 | Triangular Pyramid |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |
| 11 |  |
| 12 |  |

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