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| Year  9 | | Mathematics Test  Area of Plane Shapes | | Calculator Allowed |
| Short Answer Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this test paper. | | | |
| 1. | Find the area of the triangle.  .........................................................................  .........................................................................    .........................................................................  ......................................................................... | | | |
| 2. | Find the area of the circle correct to 1 decimal place.  .........................................................................  .........................................................................    .........................................................................  ......................................................................... | | | |
| 3. | A rectangular field measures 2.4 km by 900 m. What is its area in hectares?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 4. | Find the area of the rhombus.  .........................................................................  .........................................................................    .........................................................................  ......................................................................... | | | |
| 5. | Find the area of the trapezium.  .........................................................................  .........................................................................    .........................................................................  ......................................................................... | | | |
| 6. | Find the area of the shape.  .........................................................................  .........................................................................    .........................................................................  ......................................................................... | | | |
| 7. | Find the area of the shape.  .........................................................................  .........................................................................    .........................................................................  ......................................................................... | | | |
| 8. | The cover for a child’s book is rectangular with a circular hole cut out of the front and no hole in the back. It is to be made out of card. What area of card is needed for the cover?  .........................................................................  .........................................................................    .........................................................................  ......................................................................... | | | |
| 9. | The doormat is semicircular. Find its area to the nearest 100cm2.  .........................................................................  .........................................................................    .........................................................................  ......................................................................... | | | |
| 10. | A lawn is in the shape of a rectangle with a trapezoidal section cut out of it. Find the area of the lawn.  .........................................................................  .........................................................................    .........................................................................  ......................................................................... | | | |

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| Year  9 | | Mathematics Test  Area of Plane Shapes | | 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. | What is the area of the shape shown?  A. 191 m2  B. 226 m2  C. 231 m2  D. 261 m2 | | | |
| 2. | Davida is a year 9 student. To find the area of her hand, she draws around it on a sheet of grid paper and counts the number of square centimetres. Her answer is most likely to be:  A. 20 cm2 B. 40 cm2 C. 120 cm2 D. 240 cm2 | | | |
| 3. | The rectangle and the triangle are equal in area. What is the value of *x*?  A. 12 B. 13 C. 14 D. 15 | | | |
| 4. | What is the area of the sector of a circle shown, (correct to the nearest cm2)?  A. 101 cm2  B. 134 cm2  C. 268 cm2  D. 804 cm2 | | | |
| 5. | The shaded area in square metres is given by:    A. 4π  B. 16π  C. 48π  D. 144π | | | |
| 6. | The area of the rhombus is:  A. 150 cm2  B. 300 cm2  C. 450 cm2  D. 600 cm2 | | | |
| 7. | What is the height (*h*) of the parallelogram if its area is 576 cm2?  A. 15 cm B. 16 cm C. 17 cm D. 18 cm | | | |
| 8. | The area of a rectangle is 54 cm2.  All of its sides, when measured in cm, are whole number values.  Its perimeter could be:  A. 30 cm B. 33 cm C. 35 cm D. 54 cm | | | |
| 9. | The area of the trapezium could be found using the calculation:  A.  B.  C.  D. | | | |
| 10. | Find the area of this field to the nearest m2.    A. 420 m2  B. 600 m2  C. 660 m2  D. 840 m2 | | | |
| 11. | Tada is going to pave a rectangular room which measures 8 m by 6 m with tiles that measure 20 cm × 10 cm, in the pattern shown. How many tiles will he need?  A. 400  B. 1 200  C. 1 600  D. 2 400 | | | |
| 12. | A building has a façade in the shape shown.  Each window has an area of 3m2 and the door has an area of 8 m2.  The façade (not including the doors and windows) is to be painted with two coats of paint which covers 4 m2/litre.  The paint comes in 6 litre tins.  How many tins are needed to paint the façade?  A. 5 B. 10 C. 15 D. 20 | | | |

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| Year  9 | Mathematics Test  Area of Plane Shapes | |  |
| Multiple Choice  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

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|  | Mathematics Test  Area of Plane Shapes |
| Answer Sheet |

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| Short Answer | |
| 1 | 192 cm2 |
| 2 | 113.1 cm2 |
| 3 | 216 hA |
| 4 | 1 080 cm2 |
| 5 | 420 cm2 |
| 6 | 536 cm2 |
| 7 | 580 m2 |
| 8 | 1 335 cm2 |
| 9 | 2 900 cm2 |
| 10 | 640 m2 |

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