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| Year | Mathematics Test  Area of Plane Shapes | **Calculator Test** |
|  | Name |  |

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| **Answer all questions in the spaces provided on this test paper by**  **Writing the answer in the box provided.**  **or**  **Shading in the bubble for the correct answer from the four choices provided.**  **Show any working out on the test paper.** | |
| 1. | A rectangular paddock measures 2.5 km by 800 m. Its measurements in kilometres are:  2 500 m by 800 m 2.5 km by 8 km  250 m by 800 m 2.5 km by 0.8 km |
| 2. | What is the area of the square?  9.6 cm2  576 cm2  96 cm2  5.76 cm |
| 3. | Which unit would be the most appropriate to measure the area of this page.  Square metres Hectares Square centimetres Centimetres |
| 4. | A rectangular table cloth measures 2.5 m by 3.2 m. What is its area in square metres?  m2 |
| 5. | Two square sheets of paper have measurements 80 cm and 1.2 m. What is the difference in their areas?  40 cm2 160 cm2 4 444 cm2 8 000cm2 |
| 6. | By first measuring the dimensions of the shaded rectangle, calculate its area to the nearest square centimetre.    cm2 |
| 7. | The two rectangles both have a perimeter of 20 cm. The width of Rectangle A is 1 cm and the width of Rectangle B is 3 cm. Which statement is true?  The areas must be the same.  Rectangle A has a greater area.  Rectangle B has a greater area.  Rectangle B has a greater length. |
| 8. | What is the area of the triangle?  Area = cm2 |
| 9. | Which calculation could be used to find the area of the triangle? |
| 10. | Find the area of the triangle ABC.  Area = cm2 |
| 11. | Calculate the area of the triangle PQR.  Area = m2 |
| 12. | Find the area of the parallelogram shown.  320cm2  384cm2  640cm2  768cm2 |
| 13. | A field is in the shape of a parallelogram with the dimensions shown.  Find the area of the field  585 m2  630 m2  1 170 m2  1 260 m2 |
| 14. | A room has an area of 12.5 square metres. What is its area in square centimetres?  1 250 cm2  12 500 cm2  125 000 cm2  1 250 000 cm2 |
| 15. | A manufacturer has some material to make several identical kites. A sketch of one kite is shown. Find the area of material needed for the kite.  Area = m2 |
| 16. | An historic house has a window which is in the shape of a rhombus with diagonals 1.6 m and 0.8 m. What is the area of glass in the window?  0.32 m2  0.64 m2  1.28 m2  2.56 m2 |
|  | Questions 17 and 18 refer to the diagram of a section of lawn. |
| 17. | Find the area of the lawn, to the nearest square metre.  Area = m2 |
| 18. | The lawn is to be spread with a fertiliser at a rate of 12.5 grams/m2. If a handful holds approximately 25 grams, how many handfuls of fertiliser would be needed to cover the lawn?  handfuls. |
| 19. | A trapezium is shown below. Calculate its area.  Area = cm2 |
| 20. | What is the area of the circle?  50.3 cm2  100.5 cm2  804.2 cm2  3 217.0 cm2 |
| 21. | A garden has a semicircular bed as shown. Find the area of the bed.  Area = m2 |
| 22. | What is the area of this sector of a circle (in terms of π)? |
| 23. | A sign to welcome visitors to a town is made of sheet metal in the shape shown. What area of metal was used for the sign?  Area = m2 |
| 24. | The front of a barn is in the shape shown.  It is to be painted with a paint which covers 40 m2 per tin.  The door has an area of 15 m2 and is not to be painted.  How many tins would need to be bought to paint the front of the barn?  tins are needed. |

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