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| Year  7 | Practice Test – Shapes |  |
|  | Name |  |

**Use a ruler to draw all straight lines.**

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| 1. | The shape shown is a :  Rhombus Rectangle Parallelogram Trapezium |
| 2. | A triangle which has no sides which are equal in length is called :  a scalene triangle an isosceles triangle  an equilateral triangle a reflex triangle |
| 3. | Use a ruler to draw a sketch of an isosceles triangle: |
| 4. | Which is not true of a rectangle?  Opposite sides are equal All angles are right angles.  Four axes of line symmetry. Rotational symmetry, order 2. |
| 5. | Use a number between 1 and 10 to correctly complete the statement below:  You can draw exactly diagonals in any quadrilateral. |
| 6. | Which is an accurate description of the shape shown below?  A regular hexagon. An irregular hexagon.  An irregular octagon. A regular octagon. |
| 7. | Use a number between 1 and 20 to correctly complete the statement below:  You can draw exactly diagonals in any hexagon. |
| 8. | Which shape below is a non convex polygon? |
| 9. | The shape shown at right has :  Four axes of line symmetry and point symmetry.  Two axes of line symmetry and no point symmetry.  Four axes of line symmetry and no point symmetry.  Eight axes of line symmetry and point symmetry. |
| 10. | What order of rotational symmetry does a parallelogram have?  2 1 4 8 |
| 11. | Which solid below is not a polyhedron? |
| 12. | Which solid below is a prism? |
| 13. | Which solid below is convex ? |
| 14. | Which shape below is an oblique pyramid? |
| 15. | Use the base below to draw a sketch of a right pentagonal prism. |
| 16. | A right cylinder is shown below. Using the base drawn beside it, draw an oblique cone with the same height as the cylinder. |
| 17. | The faces *ABCD* and *AEHD* of the solid below, are parallelograms.  Which statement is true?  *AD* and *BC* are parallel lines and *AD* and *EH* are skew lines.  *AD* and *BC* are skew lines and *AD* and *EH* are parallel lines.  *AD* and *BC* are parallel lines and *AD* and *GC* are skew lines.  *AD* and *BC* are skew lines and *AD* and *GC* are parallel lines. |
| 18. | The solid shown is a cube. Which of the edges listed below is parallel to *JK*, intersects with *LP* and is skew with *NQ*?  *LM QP NO OP* |
| 19. | How many vertices and edges does the solid shown below have?  vertices  edges |
| 20. | Complete the table below to illustrate Euler’s rule for a rectangular Prism. |
| 21. | Use a ruler and the isometric grid below to complete a neat sketch of a hexagonal prism. |
| 22. | Beside the solid below, use a ruler to draw its front view (elevation) and top view (plan). |
| 23. | Draw a three dimensional sketch of the solid represented below. |
| 24. | Draw a three dimensional sketch of the solid whose net is shown below. |
| 25. | Which of the following nets could not be folded to produce a cube? |