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| Year  8 | Mathematics Practice Test –  Polygons and Circles | **Calculator Practice Test** |
|  | Name |  |



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| 1. | In the pattern below, which types of triangle are used?  Scalene and isosceles.  Scalene and equilateral.  Equilateral and isosceles.  Right and isosceles. |
| 2. | Triangle *ABC* is a  Right isosceles triangle.  Acute equilateral triangle.  Obtuse isosceles triangle.  Right scalene triangle. |
| 3. | Which triangle below is an obtuse scalene triangle? |
| 4. | The value of *x* is: |
| 5. | Find the value of *y* in the diagram below.  *y =* |
| 6. | Find the value of *z* in the diagram below. |
| 7. | Find the size of the exterior angle *ABD* below. |
| 8. | The value of e in the diagram below is |
| 9. | The value of *m* is: |
| 10. | Find the value of *b* in the diagram below. |
| 11. | Find the value of *d* in the diagram below. |
| 12. | A quadrilateral has these properties.  *The diagonals are equal in length and bisect each other at right angles.*  The quadrilateral is  a rhombus. a rectangle. a kite. a square. |
| 13. | Which of the following is not a property of a parallelogram?  The opposite sides are equal.  Has two axes of line symmetry.  The diagonals bisect one another.  The opposite angles are equal. |
| 14. | Find the value of *k* in the quadrilateral below. |
| 15. | The angles marked *a*o and *b*o in the trapezium below are:  both obtuse.  complementary.  equal.  supplementary. |
| 16. | Which of the quadrilaterals below does not have diagonals which bisect one another?  A rhombus. A parallelogram. A kite. A rectangle. |
| 17. | Find the value of *f* in the kite below. |
| 18. | What is the value of g in the rectangle below? |
| 19. | is a rectangle.  is a point on the diagonal  and  is a point on the side The value of  is:  *109 251 116 64* |
| 20. | What is the value of t in the kite below? |
| 21. | Which of the statements below about a circle are true?  Statement A The radius drawn anywhere in a given circle is always the same length.  Statement B A chord divides a circle into two regions called the major and minor sectors.  Only statement A is true.  Only statement B is true.  Both statements are true.  Neither statement is true. |
| 22. | Which of the features are not shown on the circle shown at right?  A tangent.  A diameter.  A chord.  A radius. |
| 23. | The two shaded regions on the circle at right are:  a sector and a semicircle.  a segment and a semi circle.  a quadrant and a sector.  a quadrant and a segment. |
| 24. | Find the value of x in the circle shown. |
| 25. | What are the values of a and b in the circle shown?    .  .    . |