Note: (1) Think and Answer (2) Mind Choices

Name: **Date:**

Areas of Improvement:

Maximum Marks	
Marks Obtained	
%	

Parent's Signature	**Parent's Signature**

Note to Student: Please solve unattended questions in notebook meant for test.

Section A [0.5 x 6 = 3]

Q1. State True or False:

A. A square is not a regular polygon. Mark True / False.

B. A rectangle is a regular polygon. Mark True / False.

C. The sum of all interior angles of a polygon is equal to 180°. Mark True / False.

D. The sum of measures of all interior angles of a hexagon is 720°. Mark True / False.

E. The number of sides in a polygon can be a natural number or a fraction or a decimal number.. Mark True / False.

F. The smallest number of sides of a polygon is 4. Mark True / False.

Section B [1 x 2 = 2]

Q1. What is a regular polygon? State the name of a regular polygon of
(i) 3 sides
(ii) 4 sides
(iii) 6 sides

Q2. Give an example of a geometrical shape that is not a polygon.

Section C [1 x 6 = 6]

Q3. Find the sum of all the interior angles of a polygon having 13 sides.

Q4. The sum of all the interior angles of a polygon is 1440°. How many sides does the polygon have?

Q5. Find the exterior angle of a polygon with sides 6.

Q6. Is it possible to have a polygon, where the sum of whose interior angles is 9 right angles?

Q7. Is it possible to have a polygon whose sum of interior angles is 910°?

Q8. Find the measure of each angle of a regular Nonagon.

Section D (Any 6 Questions only) [2 x 6 = 12]

Q9. Which polygon has both its interior and exterior angles the same?

Q10. Calculate the sum of angles of a polygon with :
(i) 10 sides
(ii) 12 sides
(iii) 20 sides
(iv) 25 sides

Q11. The interior angles of a pentagon are in the ratio 4 : 5 : 6 : 7 : 5. Find each angle of the pentagon.

Q12. The two angles of a hexagon are 120° and 160°. If the remaining four angles are equal, find each equal angle.

Q13. Find the number of sides in a regular polygon, if its each exterior angle is :
(i) 1/ 3 of a right angle
(ii) two-fifth of a right-angle.

Q14. The sum of the interior angles of a regular polygon is twice the sum of its exterior angles. Find the number of sides of the polygon.

Q15. Three of the exterior angles of a hexagon are 40°, 51 ° and 86°. If each of the remaining exterior angles is x°, find the value of x.

Q16. The ratio between an exterior angle and the interior angle of a regular polygon is 1 : 5. Find
(i) the measure of each exterior angle
(ii) the measure of each interior angle
(iii) the number of sides in the polygon.

Q17. The ratio of the number of sides of two regular polygons is 1 : 2, and the ratio of the sum of their interior angles is 3 : 8. Find the number of sides of each polygon.

a) 4 and 8 b) 3 and 6
c) 5 and 10 d) 6 and 12