INTERNATIONAL INDIAN SCHOOL
BURAIDAH

Worksheet For The Academic Year 2024-25

CLASS: VIII SUBJECT: Mathematics DATE: 20/05/2024

LESSON-3 Understanding Quadrilaterals

1) The minimum no.of sides needed to form a polygon is _____.
2) A six sided polygon is called _____.
3) A ____ is a closed figure made up of line segments.
4) The sum of the interior angles of a n-sided polygon is _____.
5) A _____ polygon has all its diagonals inside the polygon.
6) The sum of the exterior angles of a polygon is ____.
7) The three angles of a quadrilateral are 50^o, 110^o and 125^o. Find the fourth angle.
8) The angles of a quadrilateral are in the ratio 9:4:6:5. Find the angles.
9) ABCD is a quadrilateral with AD ‖ BC. If $\angle A = 110^o$ and $\angle D = 130^o$, find $\angle B$ and $\angle C$.
10) Find the no.of sides of a regular polygon whose each exterior angle is 36^o.
11) Find the measure of each exterior angle of a regular hexagon.
12) In a parallelogram a) one angle is 50^o,find the remaining angles.
b) the adjacent angles are y and 2y, find the measure of the remaining angles.
13) If the diagonals of the parallelogram ANTS intersects at O and if OA = 2y+4 , ON = x – y , OT = 8 and OS = 5 , find x and y.
14) In rectangle SILK , P is the point of intersection of the diagonals. If KP = 5cm find LP , IP , SP and KI.
15) In a rhombus ABCD, with diagonals AC and BD intersecting at O , OC = 5cm and OD = 12cm find AB , BC , CD and AD.
16) In a square the length of one diagonal is 25cm . What is the length of the other diagonal?
17) In a rhombus ABCD , where diagonals AC and BD intersects at O. If $\angle ADC = 80$, AO = 6cm , BO = 8cm and CD = 10cm find AC , BD , $\angle ABC$, $\angle BAD$ and also the perimeter of the rhombus.

ANSWERS

7) 75^o	11) 60^o	14) 5, 5, 5 ,10
8) 135^o, 60^o, 90^o,75^o	12)a) 130^o, 50^o, 130^o, 50^o	15) 13cm
9) 70^o, 50^o	b) 60^o,120^o,60^o,120^o	16) 25cm
10) 10	13) 7 , 2	17) 12,16, 80^o, 100^o, 40