

Subject: - Mathematics

PRACTICE PAPER

CBSE-8th

Topic: - Quadrilaterals

Q.1. One angle of a quadrilateral is 180° and the remaining three angles are equal.
Find the three equal angles? **Ans. 84°**

Q.2. How many sides has a regular polygon, each angle of which is of measure 108° . **Ans. $n = 5$**

Q.3. Two regular polygons are such that the ratio b/w their no. of sides is 1:2 and the ratio of measures of their interior angles is 3:4. Find the number of sides of each polygon. **Ans. $n = 5$**

Q.4. The sum of the interior angles of a polygon is three times the sum of its exterior angles. Determine the no. of sides of the polygons. **Ans. 8**

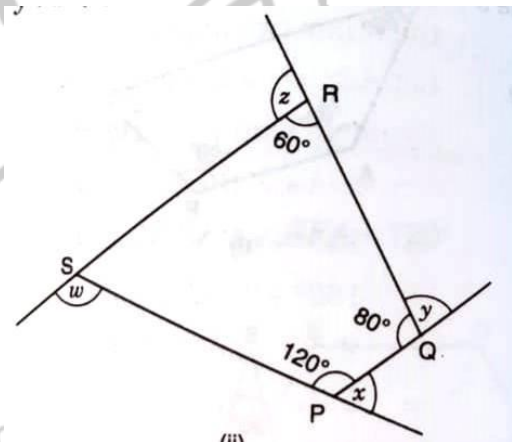
Q.5. In the adjoining figure find: $x + y + z + w$

Ans. $x = 60^\circ$

$y = 100^\circ$

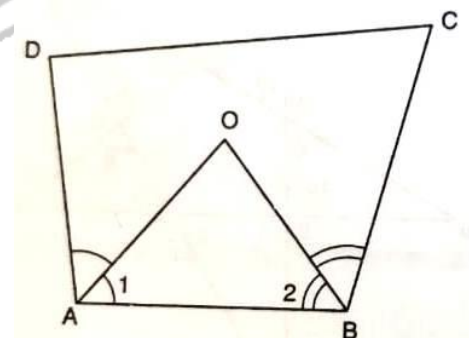
$z = 120^\circ$

$w = 80^\circ$



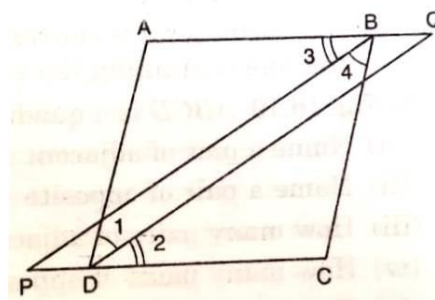
Q.6. In a quadrilateral ABCD, AO and BO are the bisectors of $\angle A$ and $\angle B$ respectively.

Prove that $\angle AOB = \frac{1}{2} (\angle C + \angle D)$.



Q.7. In Fig. bisectors of $\angle B$ and $\angle D$ of quadrilateral ABCD meet CD and AB produced at P and Q respectively.

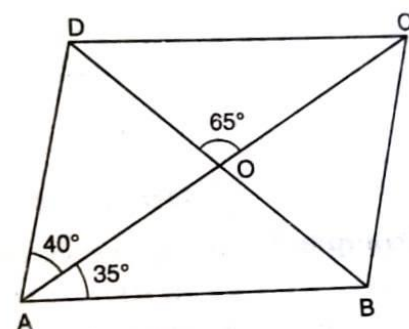
Prove that: $\angle P + \angle Q = \frac{1}{2} (\angle ABC + \angle ADC)$.



Q.8. In fig. ABCD is a //gm in which $\angle DAO = 40^\circ$, $\angle BAO = 35^\circ$ and $\angle COD = 65^\circ$. Find:

i) $\angle ABO$ ii) $\angle ODC$ iii) $\angle ACB$ iv) $\angle CBD$

Ans. i) $\angle ABO = 80^\circ$, ii) $\angle ODC = 80^\circ$,
iii) $\angle ACB = 40^\circ$ iv) $\angle CBD = 25^\circ$



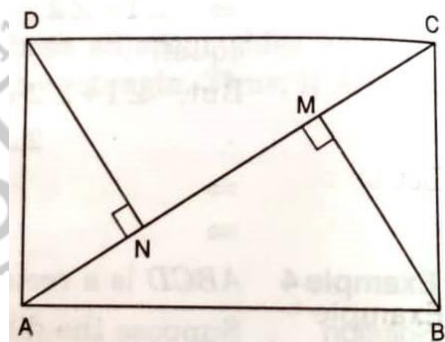
Q.9. In a //gm ABCD, the bisectors of $\angle A$ and $\angle B$ meet at O. Find $\angle AOB$. **Ans. 90°**

Q.10. The shorter side of a //gm is 4.8 cm and the larger side is half as much again as shorter side. Find the perimeter of the //gm. **Ans. 24 cm.**

Q.11. ABCD is a rhombus in which the altitude from D to side AB bisects AB. Find the angles of the rhombus **$\angle A = \angle C = 60^\circ$ and $\angle B = \angle D = 120^\circ$**

Q.12. In Fig. ABCD is a rectangle. BM and DN are perpendiculars from B and D respectively on AC.

Prove that: i) $\triangle BMC \cong \triangle DNA$ ii) $BM = DN$



Q.13. The diagonals of a rectangle ABCD meet at O. If $\angle BOC = 44^\circ$, Find $\angle OAD$.

Ans. 68°

Q.14. All the angles of a quad. are equal to each other. Find the measure of each. Is the quad. a //gm? What special type of //gm is it? **Ans. 90° each, Yes, Rectangle**