

VIII - Mathematics Assignment No.-03 Understanding Quadrilaterals

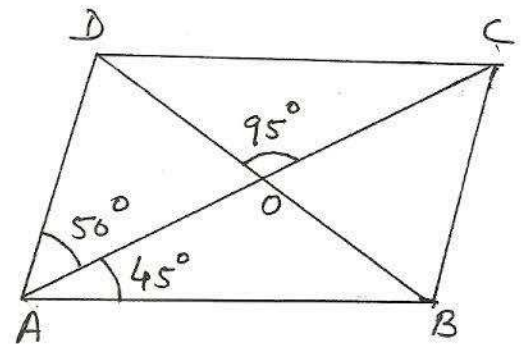
- Q1. The ratio of the two sides of a parallelogram is 1:2 and its perimeter is 60m. Find the sides of the parallelogram.
- Q2. The sum of the two opposite angles of a parallelogram is 150° . Find all the angles of the parallelogram. (11^{gm})
- Q3. The perimeter of a 11^{gm} is 120cm. If one side is greater than the other by 20cm. Find the lengths of the sides of the 11^{gm}.

Q4. In the 11^{gm} ABCD

$$\angle DAO = 50^\circ$$

$$\angle BAO = 45^\circ$$

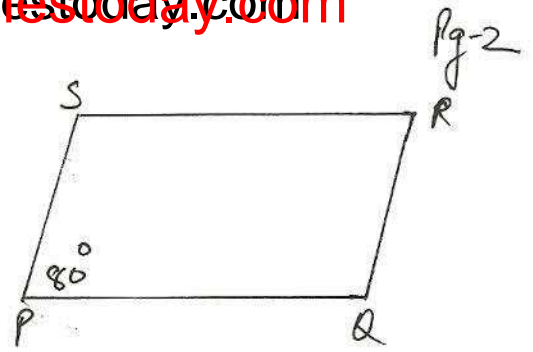
$$\angle COD = 95^\circ$$



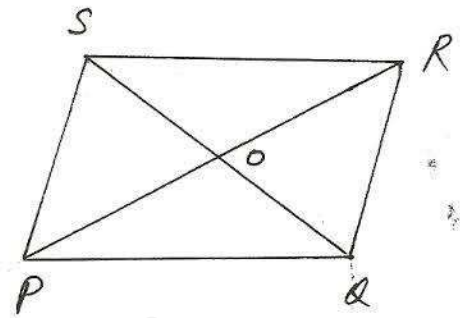
- Calculate
- (i) $\angle ABO$
 - (ii) $\angle ODC$
 - (iii) $\angle ACB$
 - (iv) $\angle CBD$

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Q5. In the figure, PQRS is a $\parallel\text{gm}$ and one of the angles $\angle P = 80^\circ$. Calculate other angles.

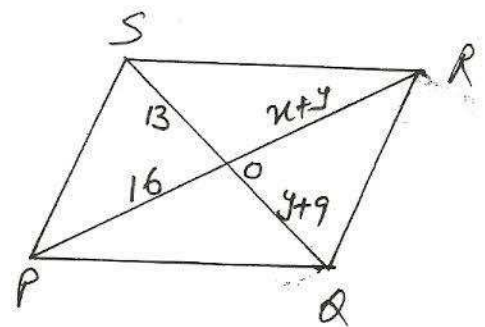


Q6. PQRS is a $\parallel\text{gm}$ in which $OQ = 4\text{ cm}$ and PR is 6 more than SQ . Find OP .



Q7. Two adjacent angles of a $\parallel\text{gm}$ ABCD are in the ratio 2:3. Find all the angles of the $\parallel\text{gm}$.

Q8. PQRS is a $\parallel\text{gm}$. The diagonals PR and SQ intersect at O. if



$$OQ = (y+9)\text{ cm}, \quad OS = 13\text{ cm}$$

$$OP = 16\text{ cm}, \quad OR = (x+y)\text{ cm}$$

Find x and y .

ANSWERS

(Q1) 20m, 10m	(Q5) $\angle P = 80^\circ$, $\angle Q = 100^\circ$ $\angle R = 80^\circ$, $\angle S = 100^\circ$
(Q2) 75° , 105° , 75° , 105°	(Q6) 7cm
(Q3) 20cm, 40cm	(Q7) 72° , 108° , 72° , 108°
(Q4) 40° , 40° , 50° , 45°	(Q8) $x = 12\text{ cm}$, $y = 6\text{ cm}$.