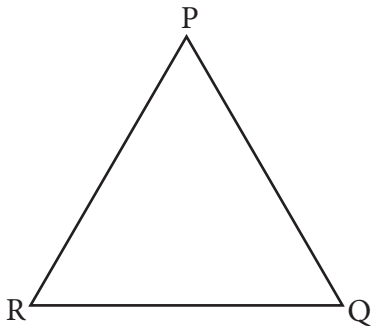


**Q1. The given  $\Delta ABC$  has three vertices. Find the side opposite each vertex and fill in the table given below:**

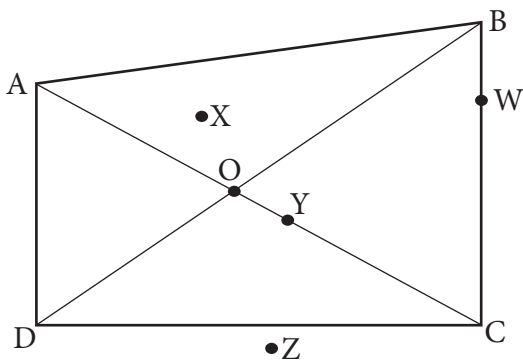
Vertex	Side opposite the vertex
A	_____
B	_____
C	_____

**Q2. Mark the following points in the  $\Delta PQR$  given below:**

- Two points A and B in the interior of  $\Delta PQR$
- Two points C and D in the exterior of  $\Delta PQR$
- A point E on the  $\Delta PQR$



**Q3. Look at the figure carefully and answer the following questions:**

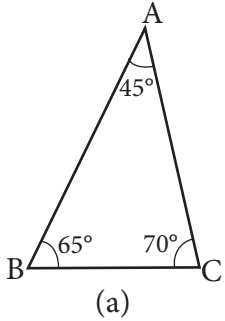


- How many points lie in the interior of  $\Delta ABD$ ? \_\_\_\_\_
- How many points lie on the boundary of  $\Delta ADC$ ? \_\_\_\_\_
- Name the point that lies in the interior of  $\Delta BDC$ . \_\_\_\_\_
- Name the triangle for which the points W, X, Y and Z lie in the exterior. \_\_\_\_\_

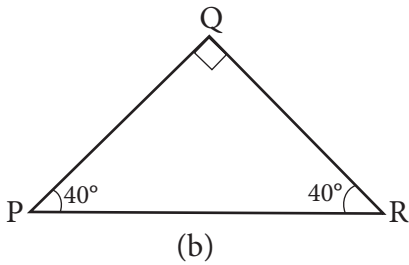
**Q4. Tick the correct option (Yes/No). Is a triangle possible if its three angles measure:**

- |                                    |        |
|------------------------------------|--------|
| a. $25^\circ, 125^\circ, 95^\circ$ | Yes/No |
| b. $70^\circ, 30^\circ, 80^\circ$  | Yes/No |
| c. $90^\circ, 90^\circ, 45^\circ$  | Yes/No |
| d. $70^\circ, 70^\circ, 60^\circ$  | Yes/No |

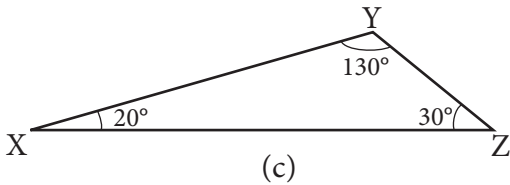
**Q5. Classify the following triangles on the basis of angles:**



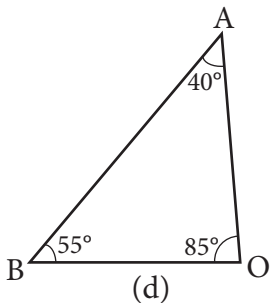
: \_\_\_\_\_



: \_\_\_\_\_



: \_\_\_\_\_



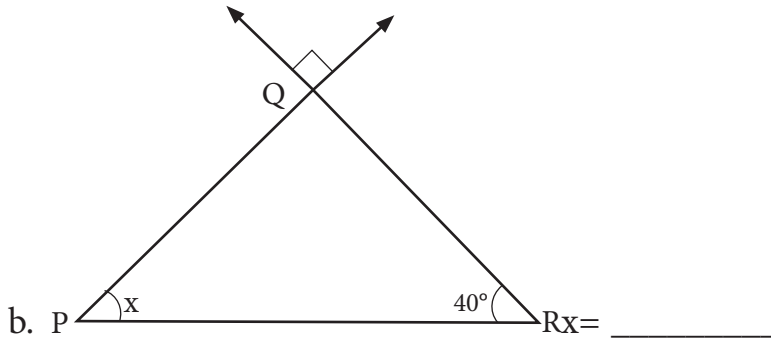
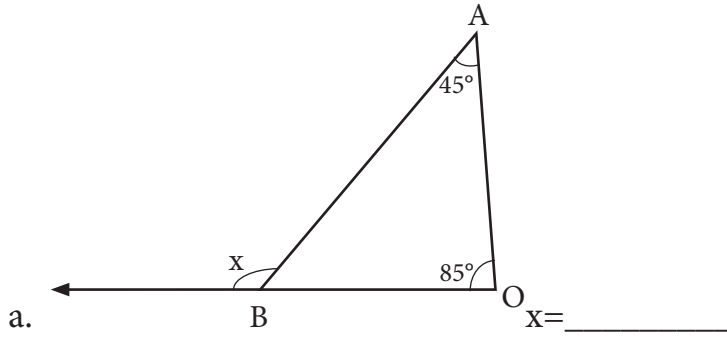
: \_\_\_\_\_

**Q6. One angle of a triangle is twice the other, and the third angle is equal to the sum of the other two angles. Find the measure of all the three angles of the triangle. Also find the type of triangle formed.**

Answer: Measure of the angles : \_\_\_\_\_

Type of triangle : \_\_\_\_\_

**Q7. Find the value of x in the following:**



**Q8. If there is a point O in the interior of  $\triangle ABC$ , state whether the following statements will be true or false:**

- a.  $OA + OB > AB$  \_\_\_\_\_
- b.  $OA + OC > AC$  \_\_\_\_\_
- c.  $OB + OC > BC$  \_\_\_\_\_
- d.  $OA + OB + OC > AB + BC + CA$  \_\_\_\_\_

**Q9. The dimensions of a  $\triangle PQR$  are given. Classify the triangles and write their name on the basis of the length of their three sides.**

Length of the sides	Type of triangle
a. 5 cm, 5 cm, 3 cm	_____
b. 3 cm, 4 cm, 5 cm	_____
c. 10 cm, 10 cm, 10 cm	_____
d. 2.5 cm, 3 cm, 4.5 cm	_____

**Q10. In  $\triangle ABC$ , AX is the altitude,  $\angle ABC = 50^\circ$ ,  $\angle ACB = 30^\circ$ . Find the measure of  $\angle BAX$  and  $\angle CAX$ .**

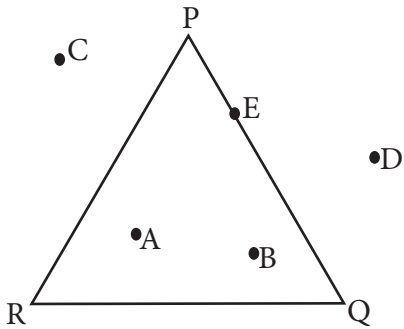
$\angle BAX = \underline{\hspace{2cm}}$   
 $\angle CAX = \underline{\hspace{2cm}}$

## ANSWERS

1.

Vertex	Side opposite the vertex
A	BC
B	AC
C	AB

2.



3. a. 1 point,    b. 2 points,    c. Point Y,    d.  $\Delta AOD$

4. a. No, Yes, No, No

5. a. acute-angled triangle,    b. right-angled triangle,    c. obtuse-angled triangle,  
d. acute-angled triangle

6.  $30^\circ, 60^\circ, 90^\circ$ ; right-angled triangle

7. a.  $130^\circ$ ,    b.  $50^\circ$

8. a. True,    b. True,    c. True,    d. False

9. a. isosceles triangle,    b. scalene triangle,    c. equilateral triangle,  
d. scalene triangle

10.  $\angle BAX = 40^\circ$

$\angle CAX = 60^\circ$