Activity Worksheet

Challenging brain

Sub : Mathematics **Grade: X** **Date: .....**

Name: ..... **ID No.....**

Write the correct answer for each of the following:

i. In DABC, AB = $6\sqrt{7}\,cm$, BC= 24 cm and CA= 18 cm. The angle A is

(a) an acute angle (b) an obtuse angle

(c) a right angle (d) can't say

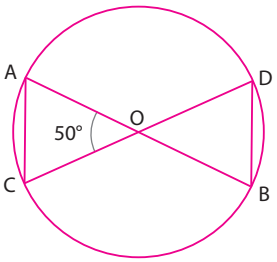
Sol.

ii. If in Fig. 4.9, O is the point of intersection of two equal chords AB and CD such that OB = OD, then triangles OAC and ODB are

(a) equilateral but not similar (b) isosceles but not similar

(c) equilateral and similar (d) isosceles and similar

Sol.



iii. It is given that Δ PQR ~ Δ ZXY, $\angle P = 60^\circ$, $\angle R = 40^\circ$, PR = 3.6 cm, XY = 4 cm and YZ = 2.4 cm. Then which of the following is true?

(a) $\angle P = 60^\circ$, PQ = 6 cm (b) $\angle Y = 60^\circ$, QR = 4 cm

(c) $\angle X = 80^\circ$, QR = 6 cm (d) $\angle Z = 40^\circ$, PQ = 4 cm

Sol.

iv. If Δ ABC ~ Δ DEF $\frac{ar(\Delta DEF)}{ar(\Delta ABC)} = \frac{9}{16}$ DF = 18 cm, then AC is equal to

(a) 24 cm (b) 16 cm (c) 8 cm (d) 32 cm

Sol.

v. The lengths of the diagonals of a rhombus are 30 cm and 40 cm. Then, the length of the side of the rhombus is

(a) 20 cm (b) 22 cm (c) 25 cm (d) 45 cm

Sol.