

## Answers for Worksheet-2

1) Step:1) Draw a line segment AB of length 5cm

Step:2) Draw an arc of radius 5cm with 'A' as the centre

Step:3) Draw an arc of radius 5cm with 'A' as the centre

Step:4) Mark the point 'C' at the point of intersection of these two arcs.

Step:5) Join AC and BC

$\triangle ABC$  is the required equilateral triangle

2) Step:1) Draw a line segment AB of length 4cm with the ruler.

Step:2) Draw an arc of radius 5cm with 'A' as the centre.

Step:3) Draw another arc of radius 5cm with 'B' as the centre

Step:4) Mark the point 'C' at the point of intersection of the arcs

Step:5) Join AC and BC

$\triangle ABC$  is the required isosceles triangle

3) Step:1) Draw a line 'l'

Step:2) Mark a point 'A' on it and with the help of ruler or with the compasses of radius, take a point 'B' on it at a distance of 4cm

Step:3) Draw two arcs on either sides of the point 'A' of any radius and then with more than half the length between the arcs, draw two arcs with the point of intersection of the line with the arcs, Let the arcs be meeting at a point 'X'

Step:4) Draw a perpendicular through 'A' and 'X' to the line 'l'

Step:5) With the centre 'B' and radius 5cm, draw an arc so that the arc cuts the perpendicular at the point 'C'

Step:6) Join BC

$\triangle ABC$  is the required right angled triangle

4) Step: 1) Draw a line 'l'

Step:2) Mark two points 'P' and 'Q' on it

Step: 3) With the help of protractor, take  $60^\circ$  from point 'P' and  $80^\circ$  from 'Q'

Step: 4) Draw the rays from 'P' and 'Q' through the angles taken respectively

Step:5) Mark 'R' at the point of intersection of the rays.

$\Delta PQR$  if the required triangle

5)  $m\angle B + m\angle C = 110^\circ + 80^\circ = 190^\circ$ , so as the given data is not satisfying the angle sum property of the triangle, the construction is not possible

6)  $5+7=12 = 12$ . so, as the given data is not satisfying the triangle inequality property, it is not possible to construct the triangle

**MCQ Answers:**

Qn	Ans	Qn	Ans
01	c	06	b
02	c	07	b
03	a	08	c
04	c	09	c
05	c	10	d

**BY G.L. KUMAR, TGT(SS), AECS-MNGR**