CONSTRUCTIONS

2 MARK QUESTION

1) Draw a line segment of length 6 cm and divide it in the ratio $6 : 2$.

2) Draw a line segment of length 7.8 cm and divide it in the ratio $5:8$.

Measure the parts.

3) Draw a line segment of length 9 cm and divide it in the ratio $2:1$.

4) Draw a circle of radius 4 cm and draw a tangent at any point " G " on the circle.

5) Draw a circle of radius 5 cm and draw two tangents at N and M of the diameter "NM" .

6) Draw a circle of radius 4 cm. Construct a pair of tangents to the circle from a point " P " which is 9 cm away from its center.

7)Draw a circle of radius 5cm.Construct a pair of tangents to the circle from a point which is 4cm away from the circle.

8)Construct a pair of tangents to the circle of diameter 7 cmwhere the radii are inclined at an angle of $70°$.

9)Drawa pair of tangents to the circle of radius 5.5 cmwhich are inclined to each other at an angle of$60°$.

10) Draw a line segment of length $\mathrm{AB} = 8$ cmand divide itgeometrically in the ratio $3 : 2$.

11) Draw a circle of radius 4 cm and construct a pair of tangents such that the angle between them is 60°.

12) Construct a pair of tangents to the circle of diameter 7 cmwhere the tangents are inclined at an angle of $60°$

3 /4 MARK QUESTION

) Construct a triangle with sides 6 cm, 7 cm and 8 cm and then construct another triangle whose sides are $\frac{3}{4}$ of the corresponding sides of the given triangle.

2) Construct a triangle with sides 5 cm, 6 cm and 7 cm and then construct another triangle whose sides are $\frac{7}{5}$ of the corresponding sides of the given triangle.

3) Draw a triangle ABC with sides$BC = 7\,cm\,, AB = 6\,cm$and$\angle ABC = 70°$.Then construct another triangle whose sides are $\frac{3}{4}$ of the corresponding sides of the triangle ABC .

4) Draw a triangle ABC with side $BC = 7\ cm,\ \angle B = 40°, \angle A = 100°$. Then construct another triangle whose sides are $\frac{4}{3}$ of the corresponding sides of the triangle ABC .

5) Draw a circle of radius 3 cm.Take two points A and D on one of its extended diameter each at a distance of $4\ cm$ from the circle.Draw two tangents to the circle from these two points.

6) Draw two concentric circles of diameter $8\ cm$and $12\ cm$ .Construct a pair of tangents to the the circle of diameter $8\ cm$ from a point on the concentric circle of diameter $12\ cm$. Measure the length of tangents.