CONSTRUCTION (X)

1. Draw a right triangle ABC in which AC = AB = 4.5 cm and <A = 90. Draw a triangle similar to triangle ABC with its sides equals to $5/4^{th}$ of the corresponding sides of triangle ABC.
2. Draw a triangle ABC with sides BC = 6cm, AB =5cm and < ABC = 60. Then construct a triangle whose sides are $3/4^{th}$ of the corresponding sides of the triangle ABC.
3. Draw a circle of radius 4cm. Take a point P outside of the circle. Without using the centre of the circle, draw two tangents to the circle from point P.
4. Draw a circle of radius 6cm. Draw a tangent to this circle making and angle of 30 with a line passing through the centre.
5. Draw a pair of tangent to a circle of radius 5cm which are inclined to each other at an angle of 60.
6. Construct a tangent to a circle of radius 4cm from a point on the concentric circle of radius 6cm and measure its length. Also verify the measurement by actual calculations.