**ASSIGNMENT (2020-21)**

**CLASS - X SUBJECT – MATHEMATICS**

**CH – 11 (CONSTRUCTION)**

1. Construct an isosceles triangle whose base is 9 cm and altitude is 8 cm. Then construct another triangle whose sides are https://www.careerlauncher.com/cbse-ncert/class-10/10th-Math-Constructions-sam-UntitOE0.JPG of the corresponding sides of the first isosceles triangle.
2. Draw a line segment AB of length 7 cm. Taking A as centre draw a circle of radius 3 cm and taking B as centre, draw another circle of radius 2.5 cm. Construct tangents to each circle from the centre of the other circle.
3. Construct a ΔABC in which BC = 6.5 cm, AB = 4.5 cm and ∠ABC = 60°. Construct a triangle similar to this triangle whose sides are https://www.careerlauncher.com/cbse-ncert/class-10/10th-Math-Constructions-sam-UntitOE0.JPG of the corresponding sides of the ΔABC.
4. Draw a right triangle in which sides (other than hypotenuse) are of lengths 8 cm and 6 cm. Then construct another triangle whose sides are https://www.careerlauncher.com/cbse-ncert/class-10/10th-Math-Constructions-sam-UntitOE0.JPG times the corresponding sides of the first triangle.
5. Construct a triangle with sides 4 cm, 5 cm and 7 cm. Then construct a triangle similar to it whose sides are https://www.careerlauncher.com/cbse-ncert/class-10/10th-Math-Constructions-sam-UntitOE1.JPG of the corresponding sides of the given triangle.
6. Construct a ΔABC in which AB = 6.5 cm, ∠B = 60° and BC = 5.5 cm. Also construct a triangle AB’C’ similar to ΔABC whose each side is https://www.careerlauncher.com/cbse-ncert/class-10/10th-Math-Constructions-sam-UntitOE2.JPG times the corresponding side of the ΔABC.
7. Draw a ΔABC with side BC = 6 cm, AB = 5 cm and ∠ABC = 60°. Construct ΔAB’C’ similar to ΔABC such that sides of ΔABC are https://www.careerlauncher.com/cbse-ncert/class-10/10th-Math-Constructions-sam-UntitOE0.JPG of the corresponding sides of ΔABC.
8. Construct a triangle whose perimeter is 13.5 cm and the ratio of the three sides is 2 : 3 : 4.
9. Draw a circle of diameter 6.4 cm. Then draw two tangents to the circle from a point P at a distance 6.4 cm from the centre of the circle.
10. Draw a circle of radius 3.4 cm. Draw two tangents to it inclined at an angle of 60° to each other:
11. Draw ΔABC in which AB = 3.8 cm, ∠B = 60° and median AD = 3.6 cm. Draw another triangle AB’C similar to the first such that https://www.careerlauncher.com/cbse-ncert/class-10/10th-Math-Constructions-hot-UntitOE0.JPG
12. Draw an equilateral triangle of height 3.6 cm. Draw another triangle similar to it such that its side is https://www.careerlauncher.com/cbse-ncert/class-10/10th-Math-Constructions-hot-UntitOE1.JPG of the side of the first.
13. Draw an isosceles ΔABC, in which AB = AC = 5.6 cm and ∠ABC = 60°. Draw another ΔAB’C’ similar to ΔABC such that https://www.careerlauncher.com/cbse-ncert/class-10/10th-Math-Constructions-hot-UntitOE2.JPG
14. Draw a circle of radius 3 cm. Take a point at a distance of 5 cm from the centre of the circle. Measure the length of each tangent.
15. Divide a line segment of length 6 cm internally in the ratio 3 : 2.