

National Institute of Open Schooling (NIOS)
Secondary Course
Lesson –18: Constructions
Worksheet – 18

1. Draw a line segment 10 cm long. Divide the line segment in the ratio 2:3. Measure each part of line segment and also write the steps of construction.
2. Draw a line segment $AB = 8$ cm. Find point C on it such that $AC = \frac{3}{4} AB$
3. Construct a triangle ABC such that the three sides of the triangle are 5cm, 4 cm and 6 cm respectively.
4. Construct a triangle PQR such that $PQ = 6.5$ cm, $QR = 7.4$ cm and angle $Q = 45^\circ$
5. Construct a right angle triangle ABC, where angle B is right angle, base $BC = 5$ cm and hypotenuse $AC = 8$ cm.
6. Construct a triangle ABC in which $BC=8$ cm, $\angle B = 75^\circ$ and $AB + AC = 13$ cm
7. Construct a triangle ABC in which $BC=8$ cm, $\angle B = 45^\circ$ and $AB - AC = 2.5$ cm.
8. Construct a right triangle whose base is 10 cm. and sum of its hypotenuse and other side is 16 cm.
9. Construct a triangle if its perimeter is 12.5 cm and two angles are 45° and 60°
10. Construct a right angled triangle whose hypotenuse is 10 cm and one of its other two sides is 6.5cm.