Geometrical Construction

1) Draw the perpendicular bisector of a given line segment AB and write justification.

2) Construct the bisector of a given angle ABC.

3) Draw a ray AB (with initial point A) and construct a ray AC such that □BAC = 60

4) Construct a ΔABC given BC = 5 cm., AB + AC = 8 cm. and □ABC = 60deg .

5) Construct ΔABC in which BC = 4.2 cm, □B = 30o and AB − AC = 1.6 cm

6) Construct a triangle ABC, in which □B = 60deg, □C = 45deg and AB + BC + CA = 11 cm.

7) Construct ΔABC in which BC = 7 cm, □B = 75° and AB + AC = 12 cm.

8) Construct ΔPQR in which QR = 8 cm, □Q = 60° and PQ − PR = 3.5 cm.

9) Construct Δ XYZ in which □Y = 30°, □Z = 60° and XY + YZ + ZX = 10 cm.

10). Construct a segment of a circle on a chord of length 5cm. containing the following angles.
i. 90° ii. 45° iii. 120°.