

1. Construct an angle of  $90^\circ$  at the initial point of the given ray.
2. Draw a line segment  $PQ = 8.4$  cm. Divide  $PQ$  into four equal parts using ruler and compass.
3. Draw any reflex angle. Bisect it using compass. Name the angles so obtained.
4. Why we cannot construct a  $\Delta ABC$ , if  $\angle A = 60^\circ$ ,  $AB = 6$  cm,  $AC + BC = 5$  cm but construction of  $\Delta ABC$  is possible if  $\angle A = 60^\circ$ ,  $AB = 6$  cm and  $AC - BC = 5$  cm.
5. Construct angle of  $65^\circ$  using compass only.
6. Using ruler and compass, construct  $\angle XYZ = 20^\circ$
7. Construct an equilateral triangle  $LMN$ , one of whose side is 5 cm. Bisect  $\angle M$  of the triangle.
8. Construct a triangle  $ABC$  with  $BC = 8$  cm,  $\angle B = 45^\circ$  and  $AB - AC = 3.1$  cm.
9. Construct an isosceles triangle whose two equal sides measure 6 cm each and whose base is 5 cm. Draw the perpendicular bisector of its base and show that it passes through the opposite vertex
10. Construct a right triangle whose base is 8 cm and sum of the hypotenuse and other side is 16 cm.
11. To construct an isosceles  $\Delta ABC$  in which base  $BC = 4$  cm, sum of the perpendicular from  $A$  to  $BC$  and side  $AB = 6.5$  cm.
12. Construct an equilateral triangle of altitude 6 cm.

