Sathi pasala - 5th week

Grade 9

Lesson 14 - Loci and Constructions

• A set of points satisfying one or more conditions is known as a locus.

Basic Loci

• The locus of points on a plane which are at a constant distance from a fixed point is a circle.



- Examples: 1.The path of the tip of a hand of a working clock.
 2. The path of child who is swinging.
- The locus of points which are equidistant from two given points is the perpendicular bisector of the line joining the two points.



- Do the exercise 14.1
- The locus of points which are at a constant distance from a straight line are the two straight lines parallel to it and at the given constant distance from it, on either side of it.



• The locus of points equidistant from two intersecting straight lines is the angle bisector of the angles formed by the intersection of the two lines.



Construction

- Constructing a line perpendicular to a given line from an external point. Do the activity 1 given in the text book.(page no.59)
- Constructing a line perpendicular to a given line through a point on the line. Do the activity 2 given in the text book.(page no.60)
- Constructing the perpendicular bisector of a straight line segment. Do the activity 3 given in the text book.(page no.62)
- Do the exercise 14.3

Constructions related to angles

- Constructing the angle bisector.
 Do the activity 1 given in the text book.(page no. 64)
- Do the activities 1 and 2 in the text book to construct angles with the magnitude 60°, 120°.(page no.66,67)
- Follow the instructions given in page no.68 and 69 in the text book to construct the angles with the magnitude 30^o and 45^o.
- Do the exercise 14.4