Sathi pasala - 5th week

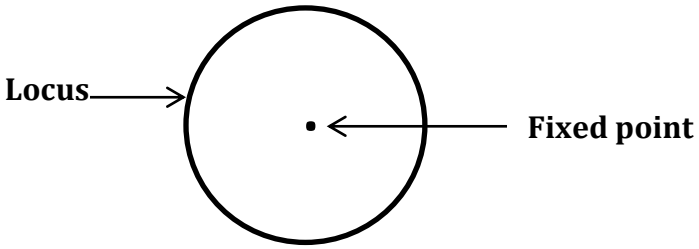
Grade 9

Lesson 14 – Loci and Constructions

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

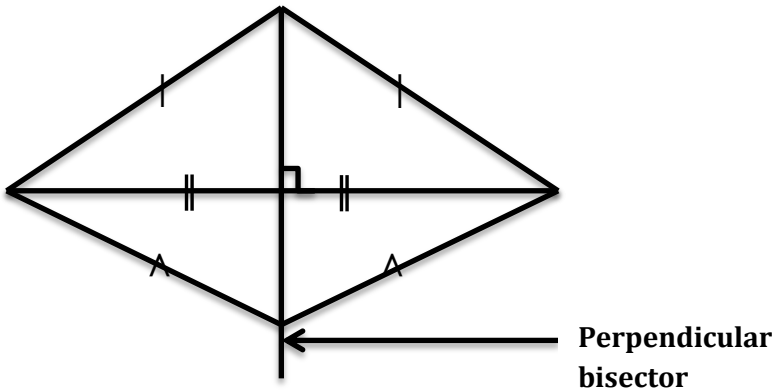
Basic Loci

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



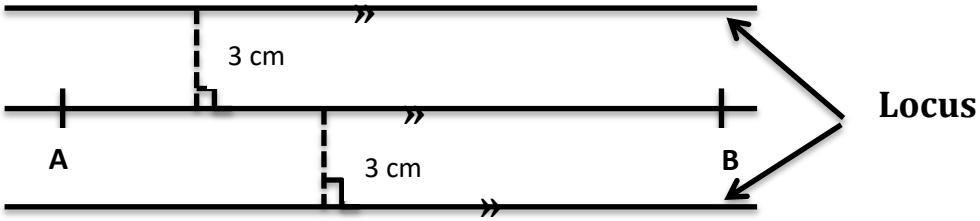
- **Examples: 1.The path of the tip of a hand of a working clock.**
  2. The path of child who is swinging.

- **The locus of points which are equidistant from two given points is the perpendicular bisector of the line joining the two points.**

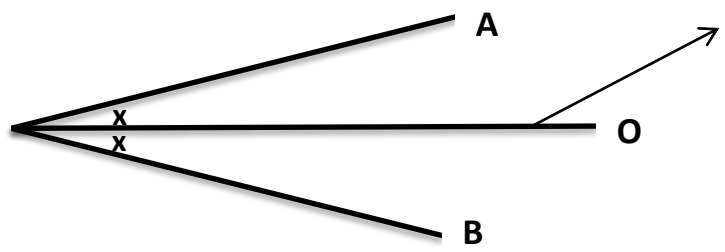


- **Do the exercise 14.1**

- **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 60^0, 120^0.(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 30^0 and 45^0.**

- **Do the exercise 14.4**