

# Loci

## Chapter 16: Loci · Topic 1

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### Key Concept

The locus of points equidistant from a fixed point is a circle, with the fixed point as centre and the distance as radius.

The locus of points equidistant from two fixed points is the perpendicular bisector of the line segment joining those points.

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

Understanding loci helps solve construction problems and describe geometric relationships between points and given conditions.

### Quick Revision Notes

- Locus is a set of points satisfying a condition.
- Equidistant from a point: locus is a circle.
- Equidistant from two points: locus is the perpendicular bisector.
- Equidistant from two lines: locus is the angle bisector.
- These are common locus types.
- Loci help solve construction problems.
- They describe geometric relationships.
- Practice builds locus identification skills.

### Practice Questions

- 1 Draw the locus of points equidistant from a fixed point.
- 2 Draw the perpendicular bisector locus for two points.
- 3 Draw the angle bisector locus for two intersecting lines.
- 4 Discuss a real-life application of loci.
- 5 Solve a locus construction problem.
- 6 Explain loci in your own words.