

Geometrical Constructions

Chapter 17: Geometrical Constructions · Topic 1

Key Concept

A perpendicular bisector of a line segment is constructed using a compass to find the exact midpoint and a line at 90° to it.

An angle bisector divides an angle into two equal parts, constructed using a compass to find equidistant points.

Constructing a specific angle, like 60° , can be done using compass and ruler techniques without a protractor.

Practising geometric constructions builds precision, patience, and a deeper understanding of geometric relationships.

Quick Revision Notes

- Perpendicular bisector: found using a compass.
- It finds midpoint, forms 90° line.
- Angle bisector: divides angle into two equal parts.
- Uses compass for equidistant points.
- Specific angles (like 60°) constructed with compass/ruler.
- No protractor needed for this method.
- Construction builds precision, patience.
- It deepens geometric understanding.

Practice Questions

- 1 Construct a perpendicular bisector of a given segment.
- 2 Construct the bisector of a given angle.
- 3 Construct a 60° angle using compass and ruler.
- 4 Practice using a compass accurately.
- 5 Discuss why constructions require precision.
- 6 Construct an equilateral triangle using a compass.