

Class 10 Mathematics – Chapter: Constructions

1. Introduction

Constructions involve drawing geometric figures accurately using only a ruler, compass, and pencil, following specific steps.

2. Basic Tools Used

- Ruler: For drawing straight lines (without measurements).
- Compass: For drawing arcs and circles.
- Protractor: (Sometimes allowed) for measuring angles.

3. Important Constructions in Class 10

- Division of a line segment into equal parts
- Construction of tangents to a circle from a point outside the circle
- Construction of a triangle given specific conditions, such as:
 - SSS (three sides)
 - SAS (two sides and included angle)
 - ASA (two angles and included side)

4. Construction Steps

- Always draw rough figure first.
- Use compass for arcs and circles accurately.
- Mark points clearly.
- Use ruler only to join points, not for measuring lengths.
- Follow steps sequentially.

5. Important Tips for Exams

- Practice constructions multiple times for accuracy.
- Learn the properties used in constructions.
- Keep your tools clean and sharp.
- Draw neat and clear figures.
- Write construction steps briefly when asked.