

CLASS 6

MATHS

NCERT SOLUTIONS

Class 6 Maths Chapter 8 Playing with Constructions NCERT Solutions

Chapter 8 of the Class 6 Maths textbook Ganita Prakash is Playing with Constructions. It covers how to use a ruler and compass to draw circles, copy line segments, and construct the perpendicular bisector of a line segment. These Class 6 Mathematics Chapter 8 solutions are also useful as quick revision notes before ...

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Constructing a Circle

Q: Describe the steps to draw a circle of radius 4 cm using a compass.

A: 1) Set the distance between the compass's two legs to 4 cm using a ruler. 2) Place the pointed leg of the compass on a point on the paper (the centre). 3) Rotate the pencil leg all the way around to draw the full circle — every point on this circle will be exactly 4 cm from the centre.

Copying a Line Segment

Q: How can a compass be used to copy a line segment of a given length onto another line?

A: Open the compass so its two points exactly match the endpoints of the original segment. Without changing this compass width, place the pointed leg on the starting point of the new line and mark an arc where the pencil leg crosses it — this marks a segment of the same length.

Constructing a Perpendicular Bisector

Q: How do you construct the perpendicular bisector of a line segment using a compass?

A: Using the same radius (more than half the segment's length), draw arcs above and below the line from each endpoint of the segment so that they intersect each other on both sides. The line joining these two intersection points is the perpendicular bisector of the original segment — it crosses the segment at its exact midpoint, at a right angle.

Constructing an Angle Bisector

Q: What does it mean to bisect an angle, and how is it done using a compass?

A: Bisecting an angle means dividing it into two exactly equal parts. Draw an arc from the vertex that crosses both arms of the angle, then draw two more arcs of equal radius from those two crossing points so they intersect inside the angle; the line from the vertex through this intersection point is the angle bisector.

Class 6 Mathematics Chapter 8 – Notes and Extra Questions

Along with these NCERT Solutions, students can also use the [Class 6 Mathematics Chapter 8 Extra Questions](#) and [Class 6 Mathematics Chapter 8 Revision Notes](#) for quick revision and extra practice.