

CLASS 10

MATHS

REVISION NOTES

Revision Notes: Class 10 Maths Chapter 6 Triangles

A fast, one-glance recap of Class 10 Maths Chapter 6 (Triangles) — for the full worked explanations, see the Solutions.

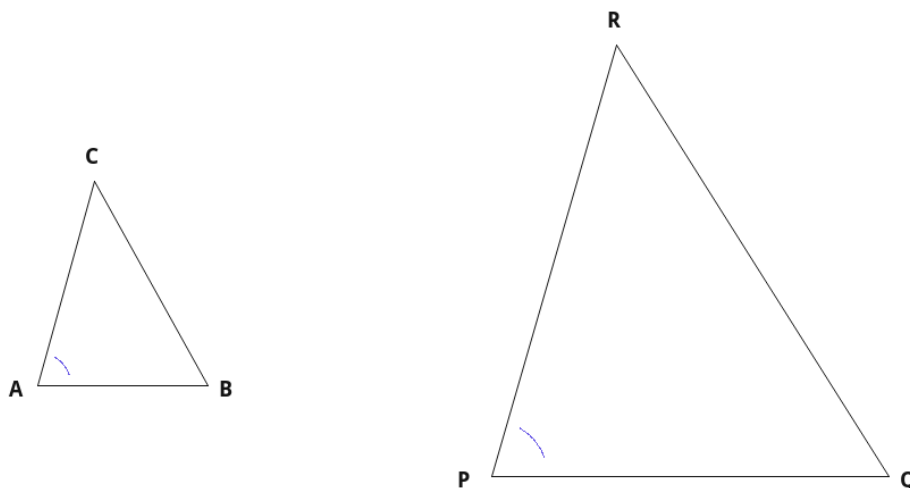
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A fast, one-glance recap of Class 10 Maths Chapter 6 (Triangles) — for the full worked explanations, see the [Solutions](#).



Triangle ABC ~ Triangle PQR: corresponding angles are equal and corresponding sides are in the same ratio.

Reference figure — similar triangles

Why This Chapter Matters

Triangles is one of the standard chapters in the CBSE/NCERT Class 10 Maths syllabus and questions from it appear regularly in board exams, in formats ranging from 1-mark objective questions to longer 3-5 mark descriptive or numerical questions. Because the concepts here often build on earlier chapters (and feed into later ones), a solid grip on this chapter also makes the rest of the Maths syllabus easier to follow.

Revision Notes: Triangles

Similar figures: same shape, not necessarily same size; congruent figures are always similar, but similar figures need not be congruent

Similarity of polygons: corresponding angles equal **and** corresponding sides proportional — both conditions needed together

Basic Proportionality Theorem (BPT / Thales' Theorem): a line parallel to one side of a triangle divides the other two sides in the same ratio

Converse of BPT: if a line divides two sides of a triangle in the same ratio, it is parallel to the third side

Similarity criteria: AA (AAA), SSS, SAS

Midpoint theorem (via BPT): a line through the midpoint of one side, parallel to another side, bisects the third side — and its converse

Ratio of areas of similar triangles = square of the ratio of corresponding sides (beyond the

current 3-exercise syllabus, but a key extension — see Extra Questions)

Pythagoras theorem via similarity: the altitude to the hypotenuse of a right triangle creates two smaller triangles, each similar to the original and to each other

Height-shadow / pole problems: use similar triangles formed by the sun's rays at the same instant — ratio of height to shadow length is constant at a given time

2023 rationalisation removed old Exercises 6.4-6.6 (Areas of Similar Triangles, Pythagoras Theorem, Optional) — only 6.1, 6.2, 6.3 remain as numbered exercises now

See also: [Extra Questions \(HOTS\)](#) / [Formulas Handbook](#)

How to Use These Notes

These revision notes are meant for quick recall in the last few days before an exam or unit test — they are not a substitute for first reading the full chapter and working through examples in the NCERT textbook. A good routine is: read the chapter once, solve the in-text and end-of-chapter questions using the linked Solutions, then come back to this page a day or two before the exam to refresh the key definitions and formulas without re-reading the whole chapter.

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