

Important Questions in CBSE Class 10 Maths

The five-signal Importance Framework – and what NCERT and CBSE actually tell you

Importance is not a list you are handed – it is a **judgement you make from five signals**

The five signals

Signal	Kind of importance	Ask yourself
Weightage	Official – marks the unit carries	Does this unit carry many marks?
Concept Coverage	Educational – unlocks other topics	Does mastering this help elsewhere?
Frequency	Historical – recurs in past papers	Does it appear often in PYQs?
Question Variety	Assessment – appears in many forms	Is it asked as 1, 3 and 5 markers?
Error Frequency	Learning – where marks are lost	Do you keep losing marks here?

Ordered from the most official signal to the most personal. The more “yes” answers, the higher the topic sits in your plan.

Signal 1, in official numbers: CBSE unit weightage

Unit	Marks	Share of the 80-mark paper
Algebra	20	25.00%
Geometry	15	18.75%
Trigonometry	12	15.00%
Statistics & Probability	11	13.75%
Mensuration	10	12.50%
Number Systems	6	7.50%
Coordinate Geometry	6	7.50%
Theory total	80	100%

Plus 20 marks of internal assessment. NCERT sets the scope: seven units, fourteen chapters – Constructions is no longer in it.

Why “chapter weightage” lists are guesswork

CBSE publishes marks **by unit, not by chapter**. So a list claiming Quadratic Equations is 18% and Arithmetic Progressions 12% is claiming 24 of 80 marks for two chapters of a **20-mark** unit – before Polynomials and Pair of Linear Equations get a single mark. Triangles at 16% plus Circles at 10% is 20.8 marks inside a **15-mark** unit. Use the seven official unit figures; treat chapter percentages as estimates.

From importance to priority

High – strong on several signals at once. Deepest, earliest attention; go first.

Medium – strong on one or two signals. Solid practice, after the high-priority topics.

Low – modest across the signals. Still cover it; just don't over-invest.

Key takeaways

- ▶ **Importance is a judgement, not a list.** Five signals let you make it for any topic.
- ▶ **Weightage is official only at unit level.** Algebra 20 and Geometry 15 are 35 of the 80 theory marks.
- ▶ **Concept coverage beats raw marks** for foundational topics – the return multiplies.
- ▶ **Question variety is a signal in its own right:** a topic asked as a 1-marker and a 5-marker needs flexible practice.
- ▶ **Your own errors are the fifth signal** – and the only one no published list can give you.
- ▶ **Every chapter is examinable.** Priority sets order and depth; it never means skip.

Worked example: scoring a topic, then meeting it four ways

Quadratic Equations vs Statistics — and the same equation as a 1, 2, 3 and 5 marker

Score the topic → set the priority → **practise it in every format CBSE can ask it**

STEP 1 · SCORE TWO TOPICS

Signal	Quadratic Equations	Statistics
Weightage	Algebra, 20 marks (25%)	Stats & Prob, 11 marks (13.75%)
Concept Coverage	High — unlocks graphs and word problems	Low — largely self-contained
Frequency	High — recurs every year	High — recurs every year
Question Variety	High — asked at 1, 2, 3 and 5 marks	Medium — mostly 3 and 5 marks
Error Frequency	High — sign slips, no root check	Medium — table set-up slips
Verdict	High priority — go first, go deep	Medium priority — steady practice

Statistics is **not** unimportant — it is 11 reliable marks. It simply earns less of your *first* hours than a topic winning on four signals.

STEP 2 · ONE EQUATION, FOUR FORMATS

Take $x^2 - 4x - 21 = 0$. This is what "question variety" looks like in a real paper.

Format	How CBSE asks it	Answer
Section A MCQ, 1 mark	The roots are: (a) 7, 3 (b) 7, -3 (c) -7, 3 (d) -7, -3	(b) 7 and -3
Section B VSA, 2 marks	Find the discriminant and state the nature of the roots.	$D = 16 + 84 = \mathbf{100}$ — positive, a perfect square, so two distinct rational roots
Section C SA, 3 marks	Without solving, find $\alpha + \beta$, $\alpha\beta$ and $\alpha^2 + \beta^2$.	4, -21 and $4^2 - 2(-21) = \mathbf{58}$
Section D LA, 5 marks	Rehman's age word problem — worked in full below.	Present age 7 years

THE 5-MARK VERSION, WORKED

Q. The sum of the reciprocals of Rehman's ages 3 years ago and 5 years from now is $1/3$. Find his present age.

Step 1 — Let: present age = x years. Ages are $(x - 3)$ and $(x + 5)$.

Step 2 — Equation: $1/(x - 3) + 1/(x + 5) = 1/3$.

Step 3 — Clear fractions: $3[(x + 5) + (x - 3)] = (x - 3)(x + 5)$, so $3(2x + 2) = x^2 + 2x - 15$.

Step 4 — Standard form: $6x + 6 = x^2 + 2x - 15 \Rightarrow x^2 - 4x - 21 = 0 \Rightarrow (x - 7)(x + 3) = 0$.

Step 5 — Reject and answer: $x = 7$ or $x = -3$. An age cannot be negative, so **$x = 7$ years**.

Check: 3 years ago he was 4, in 5 years he will be 12; $1/4 + 1/12 = 3/12 + 1/12 = 4/12 = 1/3$ ✓

The rejection line in Step 5 is a real mark. Writing "7" alone leaves method marks on the table.

NOW TRY THESE TWO

1. Find the values of k for which $x^2 + kx + 9 = 0$ has equal roots. (Hint: set $D = 0$.)

2. Two taps together fill a tank in $75/8$ hours. The larger takes 10 hours less than the smaller. How long does each take alone?

Answers: 1. $k = 6$ or $k = -6$. 2. Smaller 25 hours, larger 15 hours — check $1/25 + 1/15 = 3/75 + 5/75 = 8/75$ ✓

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