DISHANTRA

CLASS 7 MATHS MASTERY

Ganita Prakash Companion

Diagnostic, Correction & Transfer System for Class 7 Maths

DIAGNOSE | CORRECT | USE | TRANSFER

WHAT YOU GET

15 CHAPTERS

current Ganita Prakash

53 PDFS

470 delivered pages

3 FORMATS

phone + print + fillable

ROUTE SYSTEM

diagnostic + transfer

Find the smallest likely maths gap. Correct the idea. Use the efficient method. Check whether learning transfers.

Independent Dishantra learning companion. Not affiliated with NCERT, CBSE or any school.

Start with the smallest useful route

1 IF YOU DO NOT KNOW THE CHAPTER

Use the Master Diagnostic. Look for linked errors plus the learner's explanation - not a percentage score.

2 IF YOU KNOW THE CHAPTER

Open that chapter's route check or phone companion. Work only on the repeated error pattern.

3 AFTER CORRECTION

Use the changed-question transfer task. If the learner succeeds independently or with a light prompt, stop.

4 IF THE DIFFICULTY IS BROAD

Start with the most foundational prerequisite. If difficulty stays broad, involve the school teacher/tutor.

A route finder, not a score

Actual locked diagnostic content, reflowed here for phone preview.

Q1 | Chapter 1

A counter shows 7,99,999. One more is added. Write the new number.

Q2 | Chapter 1

Write 45,210,006 using Indian comma grouping.

Q3 | Chapter 2

Without fully calculating, which is greater: 499 + 86 or 500 + 84? Explain briefly.

Q4 | Chapter 2

Rewrite 180 - (50 - 17) without brackets, then calculate.

Q5 | Chapter 3

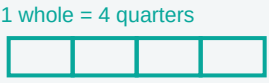
What is the value of digit 6 in 4.062?

Division & reciprocal

SEE + EXPLAIN

The idea

a divided by b asks how many groups of size b fit into a. Dividing by a fraction smaller than 1 can produce a larger quotient because more small groups fit.



METHOD

Efficient move

Model the grouping idea first. Then use the efficient rule: multiply by the reciprocal of the divisor. Only the divisor is inverted.

WORKED EXAMPLE

Try it this way

3/4 divided by 1/2 = 3/4 x 2/1 = 3/2 = 1 1/2. One and a half half-units fit in three quarters.

YOUR TURN

One short practice

Find 5/6 divided by 2/3.

CHANGED QUESTION

Why is 1 divided by 1/4 equal to 4? Use “how many quarters fit in one whole” before using the reciprocal.

A4 working edition - Route 5

Same locked content, reflowed only for this phone preview.

THE IDEA

1 whole = 4 quarters. a divided by b asks how many groups of size b fit into a. Dividing by a fraction smaller than 1 can produce a larger quotient because more small groups fit.

METHOD

Model the grouping idea first. Then use the efficient rule: multiply by the reciprocal of the divisor. Only the divisor is inverted.

EXAMPLE / MODEL

3/4 divided by 1/2 = 3/4 x 2/1 = 3/2 = 1 1/2. One and a half half-units fit in three quarters.

YOUR TURN

Find 5/6 divided by 2/3.

Actual A4 file includes larger writing space and a second route on the same page.

Changed context, same idea

Actual locked transfer tasks, reflowed for phone preview.

TASK 10 | Chapter 10 - Operations with Integers

A hiker is 120 m above a reference point, descends 175 m, then rises 38 m. Find the final position and explain the sign of the answer.

TASK 11 | Chapter 11 - Finding Common Ground

One machine cycles every 18 min and another every 30 min. They start together. When do they next align? Separately, 90 red and 126 blue beads are packed into the largest equal-size colour-specific groups. Find the group size.

Help without giving the answer

1. **Ask for the job**

   What is the question asking you to compare, measure, model, construct or find?

2. **Ask for the representation**

   Can you use a number line, table, factor list, diagram, model, graph or equation?

3. **Ask for the condition**

   Which sign, unit, parallel-line condition, triangle condition, correspondence or divisor must be checked?

4. **Ask for the efficient method**

   Which formula, compact rule or standard construction fits now that the idea is clear?

5. **Ask for a reasonableness check**

   Should the answer be larger/smaller, positive/negative, possible/impossible or typical/unusual?

6. **Ask for transfer**

   What changed in this new question, and why does the same idea still work?

- Find the smallest likely maths gap instead of assigning the whole bundle.
- Explain the idea simply, then teach the standard efficient rule or method when it helps.
- Give short, purposeful practice instead of repetitive page volume.
- Check a changed-looking task so copied procedure is not mistaken for understanding.
- Give parents/teachers a route map, reasoning guide and progress record without diagnostic labels.

INCLUDED

15 phone companions ? 15 A4 print editions ? 15 A4 fillable editions ? Master Diagnostic ? Mixed Transfer Lab ? Parent/Teacher Guide ? Reasoning Guide ? Fillable Progress Map

INDEPENDENT LEARNING SUPPORT

Route finder, not a psychometric or clinical assessment. No marks guarantee. Use school materials/teacher guidance where appropriate.

Dishantra.com ? contactdishantra@gmail.com