

Got it — **you want me to give you questions**, you will solve them, and then **I will analyze your solution**.

No code, no template — just questions to practice.

Let's start simple and then increase difficulty gradually.

LEVEL 1 — Basic Chain Rule Questions

Question 1

A piece of work can be finished by 10 men in 12 days.
How many days will it take if 15 men do the same work?

Question 2

If 6 machines produce 240 units in 8 hours, how many units will 9 machines produce in 6 hours?

Question 3

The cost of 12 meters of cloth is ₹480.
What will be the cost of 18 meters of the same cloth?

LEVEL 2 — Mixed Changes

Question 4

A job can be done by 20 men working 5 hours/day in 18 days.
How many days will it take if 15 men work 8 hours/day?

Question 5

For an event, food was planned for 80 people for 15 days.
After 5 days, 20 more people join.
How many more days will the food last?

LEVEL 3 — Multi-factor (Real Chain Rule)

Question 6

12 pumps can empty a reservoir in 15 hours.
How long will it take if 9 pumps are used, each working 1.5 times the speed of the original pumps?

Question 7

A factory runs with 16 workers working 7 hours/day and produces 560 items in 14 days.
How many items will 20 workers produce in 10 days if they now work 8 hours/day?

INSTRUCTIONS FOR YOU

1. **Pick any question** (or all).
 2. Try solving it using the chain rule.
 3. Send me your steps/answer.
 4. I will analyze your method, correct mistakes (if any), and show you the chain-rule flow.
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Tell me **which question you want to solve first**.

Here is the **cleanest and most reliable template** for Chain Rule in Aptitude.
Memorize this and you will **never** get confused again.

THE CHAIN RULE FORMULA (GENERAL RULE)

For any quantity you want to find (call it **Q**):

$$Q_2 = Q_1 \times (\text{Factor}_1) \times (\text{Factor}_2) \times (\text{Factor}_3) \times \dots$$

Where:

Each Factor =

- New value / Old value, if directly proportional
- Old value / New value, if inversely proportional

That's it.

Nothing else.

This is the universal chain rule.

How to Know Direct or Inverse?

Ask yourself:

? If this increases, does the result (Q) increase?

- Yes → Direct proportion → use New/Old
 - No → Inverse proportion → use Old/New
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Template

$$Q_2 = Q_1 \times (\text{New}_1/\text{Old}_1 \text{ or } \text{Old}_1/\text{New}_1) \times (\text{New}_2/\text{Old}_2 \text{ or } \text{Old}_2/\text{New}_2) \times \dots$$

Where each ratio depends on direct/inverse relation.

✓ DIRECT proportion examples

- Machines \leftrightarrow Output \rightarrow Direct
- Hours \leftrightarrow Work done \rightarrow Direct
- Length \leftrightarrow Cost \rightarrow Direct

Use **New / Old**

✓ INVERSE proportion examples

- Men \leftrightarrow Days \rightarrow Inverse
- Speed \leftrightarrow Time \rightarrow Inverse
- Workers \leftrightarrow Time \rightarrow Inverse

Use **Old / New**



Let me rewrite it even simpler:

If Direct \rightarrow multiply by New/Old

If Inverse \rightarrow multiply by Old/New



Want a visual mnemonic?

Direct \rightarrow Δ same direction \rightarrow New/Old

Inverse \rightarrow Δ opposite direction \rightarrow Old/New

If you want, I can give you a set of 10 practice questions where you apply ONLY this formula.