Okay Asmi, here comes **The Most Evil, Twisted-English, UPSC-SSC-Bank level PIPE & CISTERN QUESTION** — but this time I will **NOT** solve it.
You will solve it first, then I will check *every line* of your reasoning and correct only where needed.

I will write this question EXACTLY like they write in exams: confusing English, time traps, switching pipes, half-open intervals, everything.
But inside, it still contains only:
TIME – RATE – WORK

Ready?
Here is your **monster question** 👇

🔥 THE TRICKIEST PIPE & CISTERN QUESTION (for you to solve)

A large tank has **three inlet pipes** A, B, C and **two outlet pipes** D and E.

- Pipe **A** can fill the tank in **20 minutes**.
- Pipe **B** can fill it in **30 minutes**.
- Pipe **C** can fill it in **45 minutes**.
- Pipe **D** can empty the full tank in **36 minutes**.
- Pipe **E** can empty the full tank in **24 minutes**.

Initially, the tank is **half-full**.

The following events occur **in sequence**:

⭐ Stage 1

Only **A and B** are opened.
But every time **B runs for 12 minutes**, it must be **closed for 3 minutes** for pressure adjustment.
This pattern continues for **1 hour**.

⭐ Stage 2

At the end of 60 minutes, pipe **C** is opened, but pipe **A** is closed.
So now only **B (with its same cycle)** and **C** are running.
This continues for **x minutes**.

During this period, pipe **E** (outlet) accidentally opens for **10 minutes**,
but **not continuously** — it opens for **4 minutes**, closes, then opens again for **6 minutes**.

⭐ Stage 3

Then **ALL** pipes are shut for **20 minutes** due to a power cut.

⭐ Stage 4

After power returns, only outlet pipe **D** is opened.
Pipe D empties whatever water is in the tank in **18 minutes**.

❓ QUESTION

Find the value of x (in minutes).

📝 Your job

You must write your FULL reasoning:

✔ Step 1 — Convert each pipe to per-minute rate

✔ Step 2 — Work done in Stage 1

(B runs 12 min, off 3 min → repeated cycles for 60 min)
Calculate exactly how many minutes B works and how many minutes it rests.
Calculate how many minutes A works.
Then get work done.

✔ Step 3 — Work done in Stage 2

B continues its cycle, C runs continuously, E opens twice (4 + 6 minutes).
Break into sub-events.
Write the net work expression containing **x**.

✔ Step 4 — Stage 3 (no change)

✔ Step 5 — Stage 4

D alone empties the remaining water in 18 minutes.
Means remaining water =
$$
18 \times (\text{D's per-min rate})
$$

✔ Step 6 — Form the equation

$$
\text{Initial} + W_1 + W_2 = \text{Remaining level before Stage 4}
$$

✔ Step 7 — Solve for x

Give the final numeric answer.

After you finish,
👉 I will **check every line**,
👉 correct any mistake gently,
👉 and show you the exact clean method.

❤️ Your Turn

Start solving **Stage 1** first.
Write your working like this:

- A rate = __
- B rate = __
- C rate = __
- D rate = __
- E rate = __

Then:

- B works for __ minutes in 1 hour
- B rests for __ minutes
- A works for __ minutes
- Work done in Stage 1 = __

Send that part only. Let's solve it step-by-step.

🔥 **Okay Asmi… here comes the *ULTIMATE TRICKIEST* Pipes & Cisterns question** with **all the twisted English**, all the traps, all the hidden logic —
If you crack THIS one, you can crack ANY question in any govt exam.

I will NOT solve it first.
👉 **You will try.**
👉 Then I will break it step-by-step with baby logic.

Ready?
Here comes **The Hardest Pipes Question** ever.

🌪️ THE ULTIMATE TRICK QUESTION (Master Level)

A tank has three inlet pipes **A, B, C** and two outlet pipes **D and E**.

- Pipe A can fill the tank in **12 hours**,
- Pipe B can fill it in **18 hours**,
- Pipe C can fill it in **36 hours**.
- Pipe D can empty the FULL tank in **24 hours**,
- Pipe E can empty the FULL tank in **16 hours**.

The tank is **1/3rd full** initially.

Situation happens in FOUR STAGES (twisted English):

Stage 1 (Confusing Part):

A and B are opened together for **4 hours**,
but after every hour, B is closed for 10 minutes and reopened again.
(DON'T ignore this — this is where 85% fail.)

Stage 2:

After 4 hours, **C** is also opened along with A and B for **x minutes**.
During these x minutes, **E** is also accidentally opened for **15 minutes**,
but we don't know *which* 15 minutes inside those x minutes.

Stage 3:

Then **all pipes are closed** for **30 minutes**
(because electricity went out — tank remains as it is).

Stage 4:

Finally **only D** is opened, and it takes **6 hours** to empty whatever water is inside the tank.

✳ What you have to find:

👉 **Find the value of *x*** (in minutes).

😈 Why this is the hardest?

Because it includes:

✔ Break-in time
✔ Stoppage of pipe
✔ Unknown sub-interval
✔ Mixed pipes

✔ Partial tank
✔ Final reverse calculation
✔ “Inside those minutes” trap
✔ Confusing English wording
✔ Multistage event
✔ Final backward solving
✔ Everything hidden inside “rate × time”

If you solve this, **NO pipe question can ever scare you in any exam**.

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now YOU try ↓

Tell me your first attempt.
I don’t want the final answer — just show me **your way of breaking the question**.
I will guide you step-by-step.

Take your time. I’m here.