

Practice-question error log

Keep your original work. Find the first decision that needs to change. Use the next practice session to test the repair.

1. Choose questions worth reviewing.

Include missed questions, uncertain correct answers, and questions that took too long. You do not need a long entry for every question. Start with one or two recurring issues.

2. Try again before reading the explanation.

Cover the solution and retry without a timer. Compare the new attempt with your original work. What changed? Where did your reasoning first go off track?

3. Name the cause and point to evidence.

Useful categories include content, setup, algebra or execution, calculator use, and pacing. More than one can apply. Record a specific line, choice, or time decision. "Careless" does not tell you what to practice.

4. Write a method you can use again.

Explain the corrected approach in your own words. Include a check, such as substituting an answer into the original equation or checking which amount a percentage applies to.

5. Try fresh questions, then retry later.

Choose a few new questions that target the issue. Mix them with other topics once the method makes sense. Pick a later session for an independent retry and record the result. If you remember the answer, use a fresh question.

6. Let the result change the plan.

If you still cannot explain the method, return to the concept. If untimed work is accurate but timed work is not, examine the decisions that use your time. Bring the original work and your log to tutoring.

Worked example

An original practice example. The entries below show one way to make a missed question useful.

Question: An equipment rental has an \$18 one-time charge and a \$4 charge per hour. You have a \$50 budget. What is the greatest whole number of hours you can rent it?

Diagnosis

Setup: treated a fixed charge as an hourly charge.

First incorrect decision

I wrote $(18 + 4)h \leq 50$. This multiplies both charges by the number of hours.

Evidence

At zero hours, my expression predicts \$0, but the model still includes the \$18 fixed charge. My later arithmetic did not cause the error.

Corrected method

Let h = hours. Total cost = $18 + 4h$.
 $18 + 4h \leq 50$, so $4h \leq 32$ and $h \leq 8$.
Answer: 8 hours. Check: 8 hours costs \$50; 9 hours costs \$54.

Next practice

Solve two new fixed-plus-variable cost questions. Label the fixed charge and the rate before writing the equation. Then include one in a mixed set.

Delayed retry

Next study session: a rental costs \$15 once and \$6 per hour, with a \$57 budget. Write the model independently and find the greatest whole number of hours.

Retry result

Illustrative completed result: $15 + 6h \leq 57$ gives $h \leq 7$. Seven hours costs \$57; eight costs \$63. Solved independently and explained the fixed charge. Check this skill again in a mixed timed set.

My question review

Print this page again when you need another entry. Attach the original scratch work or keep the question reference with it.

Date / question reference / skill

Why I am reviewing this question

Missed, uncertain correct, too slow, or another reason?

First incorrect or uncertain decision

Evidence from my original work

Corrected method and a way to check it

Next practice: what I will do differently

Delayed retry: date and question

Retry result and my next decision
