Problem First: The Bus Challenge

Name (optional) _____ Date _____

THE PROBLEM

127 students and 11 adults travel on buses. Each bus has 48 passenger seats; the driver has a separate seat. Everyone must have a passenger seat. Buses cost $240 each. The transport budget is $750. How many buses are required, and does that fit the budget?

My estimate (before calculating):

My calculation and what I think the answer is:

Constraints checklist

Constraint	My numbers
How many people need seats?	
How many passenger seats on one bus?	
Can I use part of a bus?	
What does one bus cost? What is the budget?	

How will I check a plan?

Check the answer

A CONSTRUCTED ANSWER (NOT FROM A REAL AI)

127 + 11 = 138 people. 138 ÷ 48 = 2.875, which rounds down to 2 buses. Two buses cost $480, so the trip fits the budget.

This answer was written to contain a mistake so we can practise checking. It is not a result from any AI product.

Statement	I agree / I question / I need to check	My notes
127 + 11 = 138 people.		
138 ÷ 48 = 2.875, which rounds down to 2 buses.		
Two buses cost $480, so the trip fits the budget.		

Verification table

Buses	Seats (buses × 48)	People without a seat	Unused seats	Cost	Seating OK?	Budget OK?
2						
3						
4						

My explanation: what was wrong with the constructed answer, and what is the right plan?