Comparing Waste in Two Model Reactions

Scoring guide · one credit per question · review written work against each rubric

Comparing Waste in Two Model Reactions

Question 1

Choice (2)

Both equations have coefficient 2 in front of AB. Only Q has C_2 as a second product.

Question 2

Two AB have a mass of 2 × (10 + 20) = 60. One C_2 has a mass of 2 × 5 = 10. The total is 70.

Question 3

P recovers 42/60 = 0.70. Q recovers 54/60 = 0.90.

Question 4

Q recovers a larger fraction of AB. Each event that makes AB by Q also makes C_2, while P’s equation forms only AB. Recovering more of the desired product does not establish that less by-product was made.