Separating Two Effects on an Initial Rate

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

Separating Two Effects on an Initial Rate

Question 1

Choice (4)

B and D keep R at 2 and change only S.

Question 2

Relative to A, doubling R alone in B changes the rate from 4 to 8, a factor of two. Doubling S alone in C changes it from 4 to 16, a factor of four.

Question 3

Select Refutes the claim. A and D differ in both concentrations, so that pair cannot compare their separate effects. A to B and A to C change one reactant at a time.

Question 4

A to B doubles R at fixed S and doubles the rate, from 4 to 8. Doubling R again from B predicts 16 product units/s for E.