Checking Two Removals in a Gas Model

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

Checking Two Removals in a Gas Model

Question 1

Choice (2)

When all S is removed, the chamber still contains R. Its pressure is 60 kPa.

Question 2

The removal tests isolate contributions of 30 kPa from S and 60 kPa from R. Their sum equals the original 90 kPa.

Question 3

S still contributes 30 kPa at the same volume and temperature. R accounts for 45 − 30 = 15 kPa.

Question 4

R goes from 60 kPa to 15 kPa, so one quarter of the original R remains and three quarters was removed. The change in total pressure includes the unchanged contribution from S.