Checking Two Models of a Three-Carbon Gas

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

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Question 1

Both have three carbons. A has 3 + 1 + 2 = 6 hydrogen atoms and B has 2 + 2 + 2 = 6. Both have formula C_3H_6.

Question 2

Choice (3)

A is an open chain with one double bond. All three bonds of the ring in B are single.

Question 3

The double-bond result supports Model A. Because the two drawings have the same molecular formula, their model molecular masses are the same and mass alone cannot distinguish them.

Question 4

That carbon is attached to two H atoms by one bond each and to the neighboring carbon by a double bond. The double bond has two shared pairs, so 1 + 1 + 2 = 4 shared pairs.