STRUCTURE PROOF

1st time: TA models how to do a simple problem 2nd time: TA scaffold with OBS/DEDN. method 3rd time: TA fades

Compound \mathbf{A} , C_6H_{10} , is optically active. \mathbf{A} reacts with H_2 in the presence of PtO_2 catalyst to give a new compound \mathbf{B} , C_6H_{12} . \mathbf{B} is optically inactive. The bp, NMR, and IR spectra of \mathbf{B} are identical to those of methylcyclopentane. What is the structure of \mathbf{A} ? Explain why your structure is uniquely compatible with the observations. Carefully outline your logic. Not just about the answer. About the cognitive process.

OBSERVATION	DEDUCTION
1.	1.
2.	2.
etc.	etc.