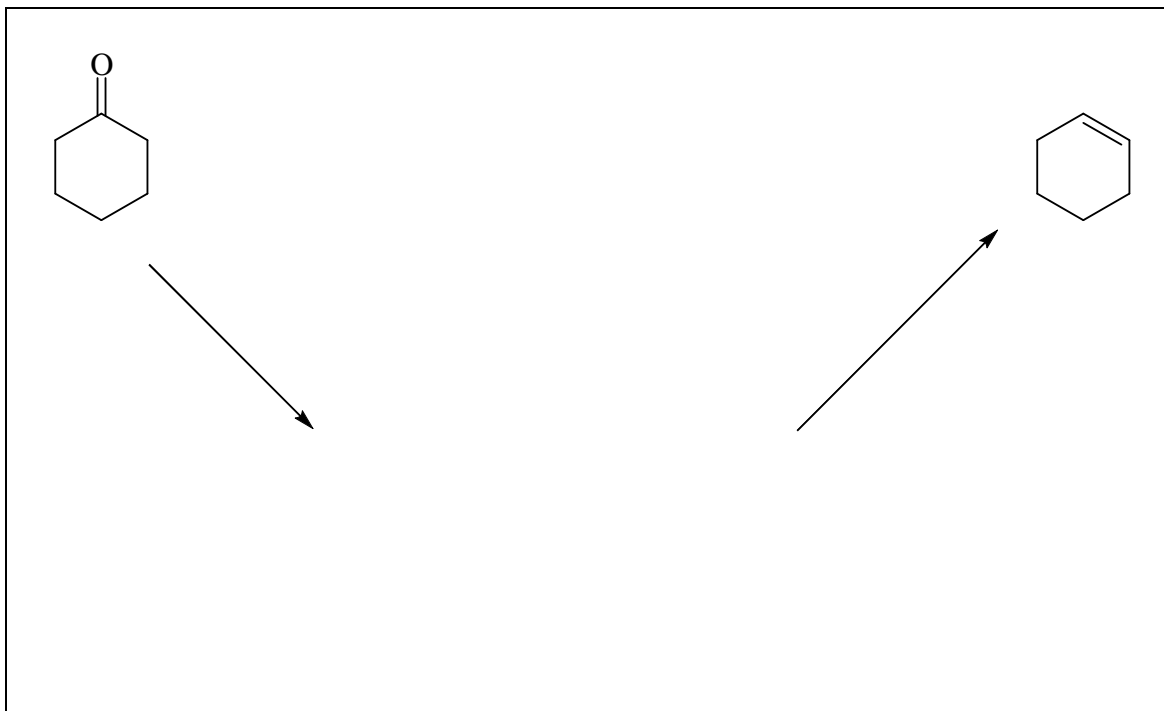


**Marks**  
**6**

- Show clearly the reagents you would use to carry out the following chemical conversion. Exactly one intermediate compound and hence two steps are required. Give the constitutional formula of the intermediate compound.



How could you distinguish between the starting material, the intermediate compound and the final product using infrared spectroscopy?