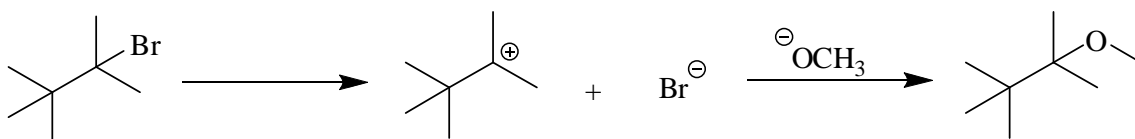
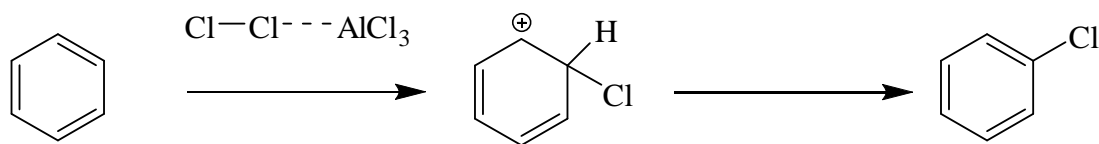


- Complete the following mechanism by adding curly arrows to illustrate the bonding changes that take place.

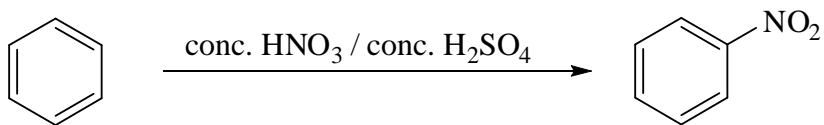
Marks
5



THE REMAINDER OF THIS PAGE IS FOR ROUGH WORKING ONLY.

- A mixture of concentrated nitric and sulfuric acids generates the nitronium ion, NO_2^+ . Benzene will react with such a mixture to give nitrobenzene.

Marks
2



What 3-part name is given to the mechanism of this nitration reaction?

| |
|--|
| |
|--|

Marks
6

- Draw the constitutional formula of the major organic product formed in each of the following reactions.

