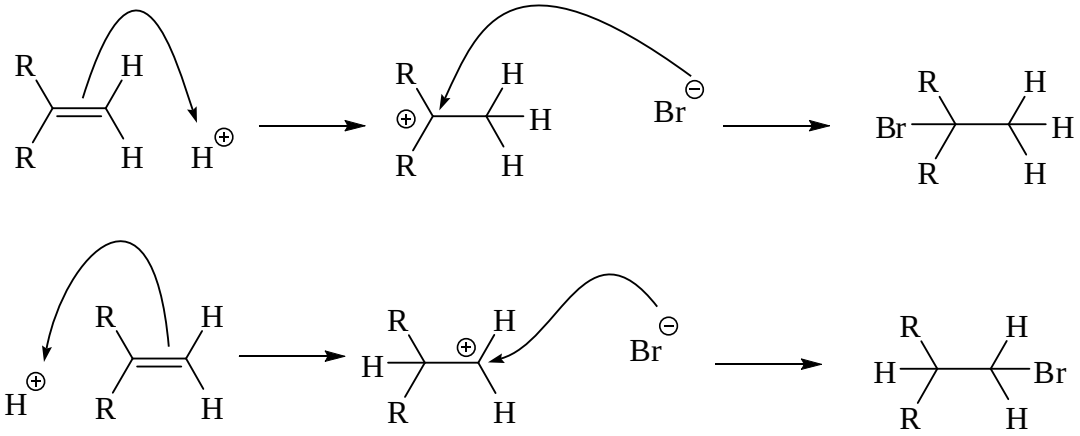
- Briefly explain Markovnikov's Rule in terms of the mechanism of electrophilic addition; *i.e.* why does Markovnikov's Rule work?

2

When HX adds across the double bond of an unsymmetrical alkene, the H goes to the carbon that already has the greater number of H's attached.

This occurs because the relative stabilities of the intermediate carbocations that can form in this reaction have the following order: tertiary > secondary > primary > CH_3^+.

For example:



The tertiary carbocation produced in the top reaction is more stable than the primary carbocation produced in the bottom reaction, so the major pathway is the top reaction.