Drawing Alkenes

When drawing alkenes

- The double bond appears after the carbon atom with the number stated in the suffix.
- The two carbon atoms sharing the double bond each have only two other bonds.

Sample Problem

Draw a structural formula for 2-methylbut-2-ene.

Solution

Step 1 The root is *but-* so there are four carbon atoms in the main chain.

Step 2 The suffix is -2-*ene* so it has a double bond after carbon atom number two.

Step 3 The prefix is 2-methyl- so there is a $-CH_3$ group of the second carbon atom.

Step 4 All carbon atoms must be bonded to enough hydrogen atoms to give them exactly four bonds.

The structural formula of 2-methylbut-2-ene is: