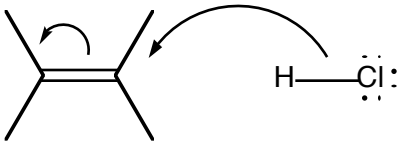
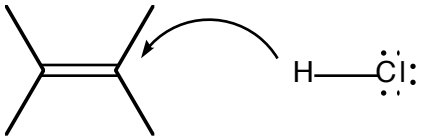
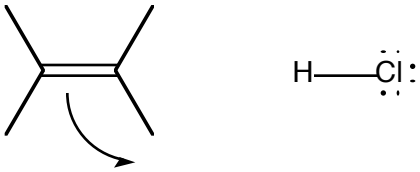
Answers to Problem 25, Chemistry 301X - 2006

(a) 

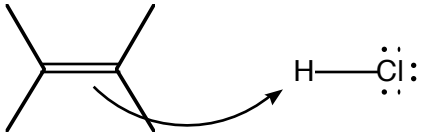
arrows backward. Arrows run **from** pairs of electrons.

(b) 

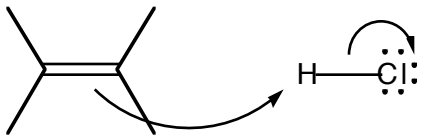
arrows backward and from the wrong place. Arrows run **from** pairs of electrons, and do not issue from atoms.

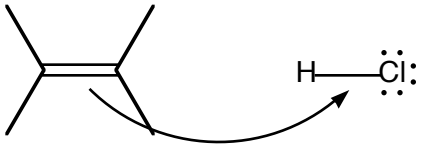
(c) 

arrow goes nowhere. Don't write arrows that go to outter space.

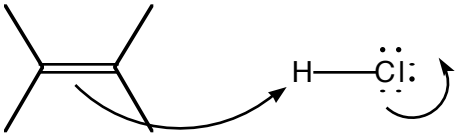
(d) 

an arrow is missing (see below). If you push two electrons "in" something has to go "out" unless there is a "hole" such as an empty orbital.

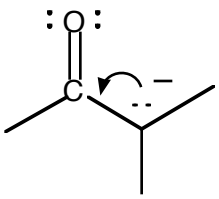


(e) 

Same as part (d), and the arrow gopes to the wrong place - the middle of a bond.

(f) 

The right-hand arrow comes from the wrong place. It should come from the bond.

(g) 

One more arrow needed - see (d) and (e) and below.