**supplement #13: *Reactions to Make Alkenes: Complete Laundry List***

***Chemistry 3514 Organic Chemistry I***

There are at least 6 distinct routes to alkenes. Four of the six are mentioned in your text.

1. **DEHYDROHALOGENATION:** halides to alkenes (base driven E2)



2. **DEHYDROHALOGENATION**: `vicinal’ dihalides to alkenes (extension of reaction 1)



3. **DEHYDRATION**: alcohols to alkenes (acid-catalyzed E1, pp 619-21)

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4.`**cis’-HYDROGENATION OF ALKYNES**: alkyne to alkene w/black magic foo foo dust



5.`**trans’-HYDROGENATION OF ALKYNES** : alkyne to alkene w/blue electron soup

or Li



6. **DIMERIZATION OF ALKENES**: alkenes to bigger alkenes with conc. sulfuric acid; a carbocation route to bigger molecules)

