Review of reactions:

1. **Halogenation of alkanes**- this is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reaction
   1. Write the reaction for the halogenation of propane.

C3H8 + 2Cl2 🡪

1. **Halogenation of alkenes**- this is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reaction
   1. Write the reaction for the halogenation of *trans-*3-methyl-2-pentene with bromine.
2. **Hydrogenation of alkenes**- this is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reaction
   1. Write the reaction for the hydrogenation of 3-ethyl-2-hexene.
3. **Hydrohalogenation of alkenes-** this is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reaction
   1. Write the reaction for the hydrohalogenation for 3-methyl-1-hexene.
4. **Hydration of alkenes-** this is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reaction
   1. Write the reaction for the hydration of *trans-* 3-methyl-2-heptene
5. What is Markovnikov’s Rule?
6. Review of molecular formulas:
   1. Alkanes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Cycloalkanes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Alkenes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Cycloalkenes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. The following reactions all start from the same molecule, **2-butene**. 1) Draw this molecule, then 2) preform the following reactions on it
   1. Hydrogenation-

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + H2 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. Halogenation-

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + Cl2 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. Hydrohalogenation –

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + HCl 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_