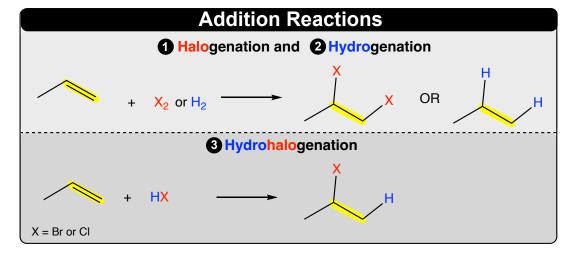
CONCEPT: INTRO TO ADDITION REACTIONS

- Alkenes and alkynes undergo ______ reactions.
 - □ Addition Reaction: addition of atoms to ______, results in double or triple bond _____.
 - ____ bond(s) are broken, new ____ bonds are formed.
- There are ____ major types of addition reactions: (1) Halogenation, (2) Hydrogenation, (3) Hydrohalogenation.



- \Box _____ of reagent needed for every π bond.

 - Double bond = $__ \sigma \& __ \pi$ bond(s) Triple bond = $__ \sigma \& ___ \pi$ bond(s).

EXAMPLE: Which of the following represents an addition reaction?

a)
$$+ Br_2$$
 $\xrightarrow{FeBr_3}$ Br $+$

b)
$$+ H_3PO_4 \longrightarrow + H_2O$$

PRACTICE: How many moles of reagent are needed for the addition of the following alkyne?