Name: Date:

ORGANIC REACTIONS I - WORKSHEET

1. Identify the type of organic reaction represented by each of the following equations:

a.

b.

c.

$$H_3C$$
— $C\equiv CH$ + 2HCI \longrightarrow H_3C — $C=CH_3$

d.

e.

$$H_2C$$
 CH_2
 CH_2

f.

- 1. Write the equation for the addition of hydrochloric acid to ethene. What is the name of the product formed?
- 2. Predict the product formed when HCl is reacted with each of the following compounds. Use Markovnikov's Rule to predict the product.

- 3. Write the equation for the substitution reaction involving one molecule of each of ethane and bromine.
- 4. Write the equation for the addition reaction involving propene and bromine.
- 5. Complete the following equations by writing the structures of the products that form. If no reaction occurs, write "no reaction".

$$H_3C$$
— CH = CH_2 + H_2O $\xrightarrow{\Delta}$ acid catalyst

$$H_3C$$
— CH_2 - CH_2 - CH_3 + H_2O — \rightarrow b.

a.