## **CONCEPT:** HYDROGENATION REACTIONS

- Under this type of reaction  $\_\_\_$  Hs are added to  $\_\_\_$   $\pi$  bond.
  - □ Due to stability of H<sub>2</sub>, a \_\_\_\_\_ is required to break the H-H bond first.

Hydrogenation Reactions

Alkene

$$H_3C - C = CH_2 + H_2$$

Catalyst

Alkane

Alkane

Alkane

 $H_3C - C = CH_2 + H_2$ 
 $H_3C - C - CH_2$ 
 $H_3C - C = CH$ 
 $H_3C - C = CH$ 
 $H_3C - C = CH$ 

**EXAMPLE**: Identify the major product of the following hydrogenation reaction.

**PRACTICE:** Write a hydrogenation reaction of the following alkyne and name the organic product formed.

