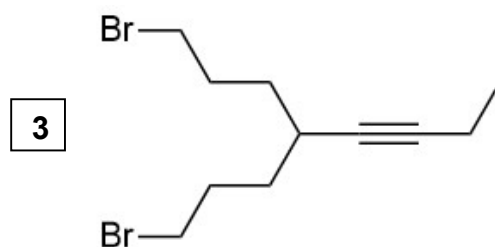
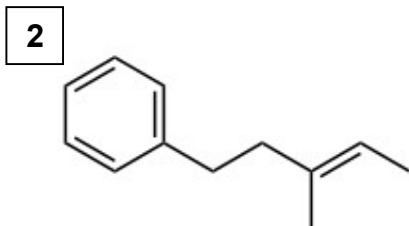
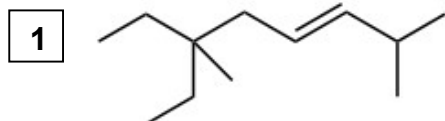


Dr. Starkey, CHM 3140 Organic Chem. I, Cal Poly Pomona  
Chapter 8 Reactions of Alkenes, Step 1 – [Practice Problems](#)

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LAURIESTARKE263 to 37607



Provide the IUPAC name for the following compound.

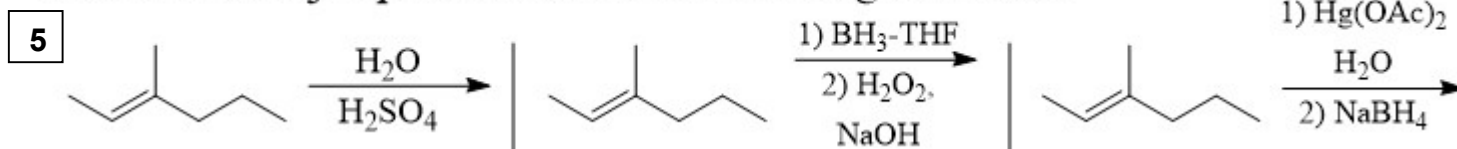


Predict the major product and briefly explain.

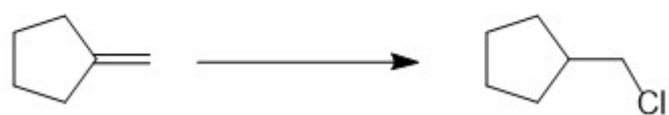
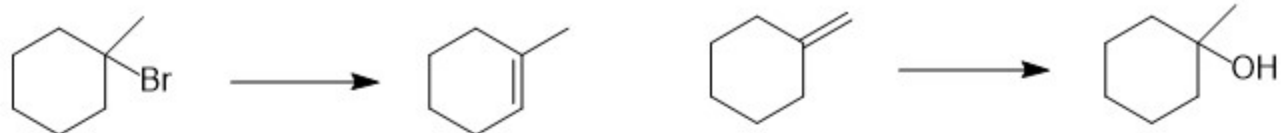


4 Mechanism:

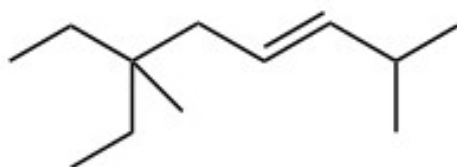
Predict the major products for the following reactions.



Provide reagents to achieve each transformation. More than one step may be required.



1 Provide the IUPAC name for the following compound.



- A) 3-ene-6-ethyl-2,6-dimethyloctane
- B) 6-ethyl-2,6-dimethyl-3-octene
- C) 3-ethyl-3,7-dimethyl-5-octene
- D) 5-ene-3-ethyl-3,7-dimethyloctane
- E) None of the above

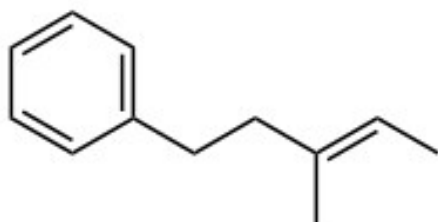
configuration

A) (*E*)

B) (*Z*)

C) none

2 Provide the IUPAC name for the following compound.



- A) 3-methyl-6-phenyl-2-hexene
- B) 1,3-dimethyl-4-phenyl-1-butene
- C) 1,3-dimethyl-4-phenyl-1-pentene
- D) 3-methyl-5-phenyl-2-pentene
- E) 3-methyl-1-phenyl-3-pentene

configuration

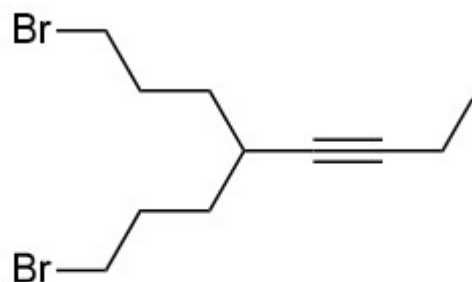
A) (*E*)

B) (*Z*)

C) none

Provide the IUPAC name for the following compound.

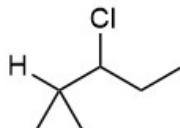
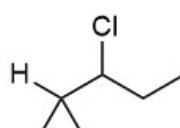
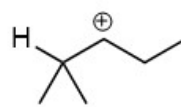
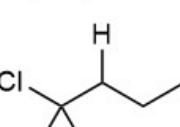
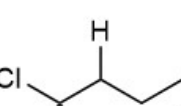
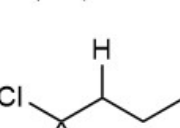
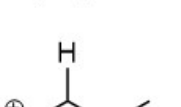
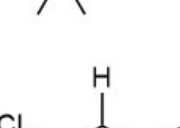
3



- A) 8-bromo-5-(3-bromopropyl)-3-octyne
- B) 1-bromo-4-(1-bromopropyl)-5-octyne
- C) 2-(1-bromopropane)-5-bromo-1-pentyne
- D) 5,5-dibromopropyl-3-pentyne
- E) 1,1-dibromopropyl-2-pentyne

4 Predict the major product and briefly explain.



- A)  because Cl is large so there is less steric hindrance (lower Energy T.S.)
- B)  because  is more stable
- C)  because  is more stable
- D)  because  is more stable
- E)  because Dr. Markovnikov told me so

5

Predict the major products for the following reactions.

