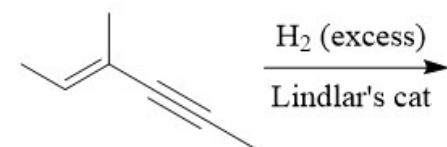
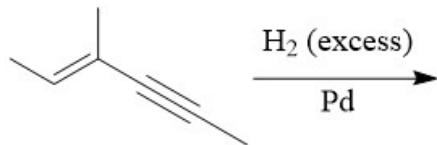


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 Chapter 9 Alkyne Reactions - Part 1

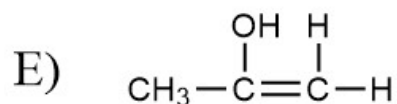
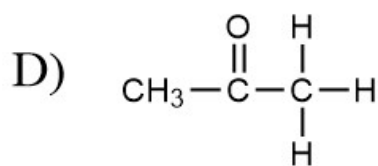
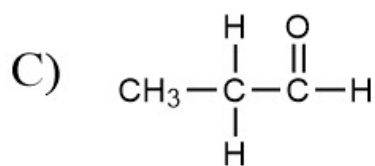
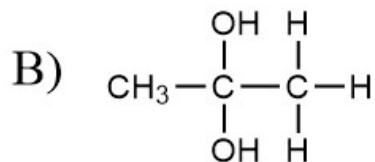
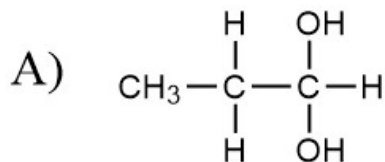
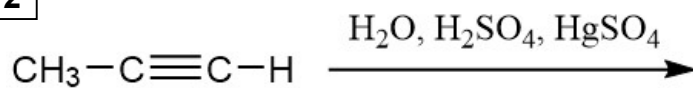


Predict the major products for the following reactions.

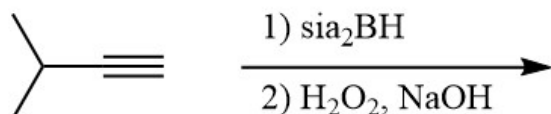
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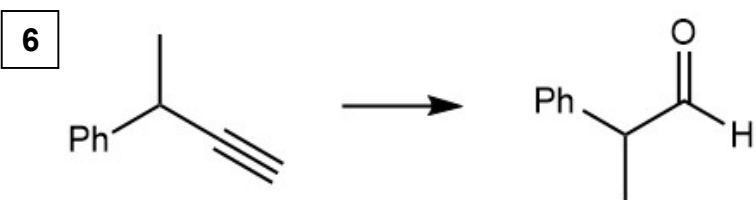
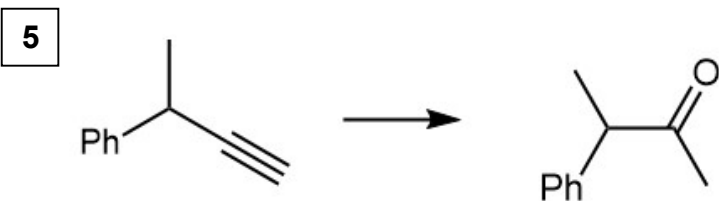
2



3



4 Which is the best set of reagents to accomplish the following transformation?

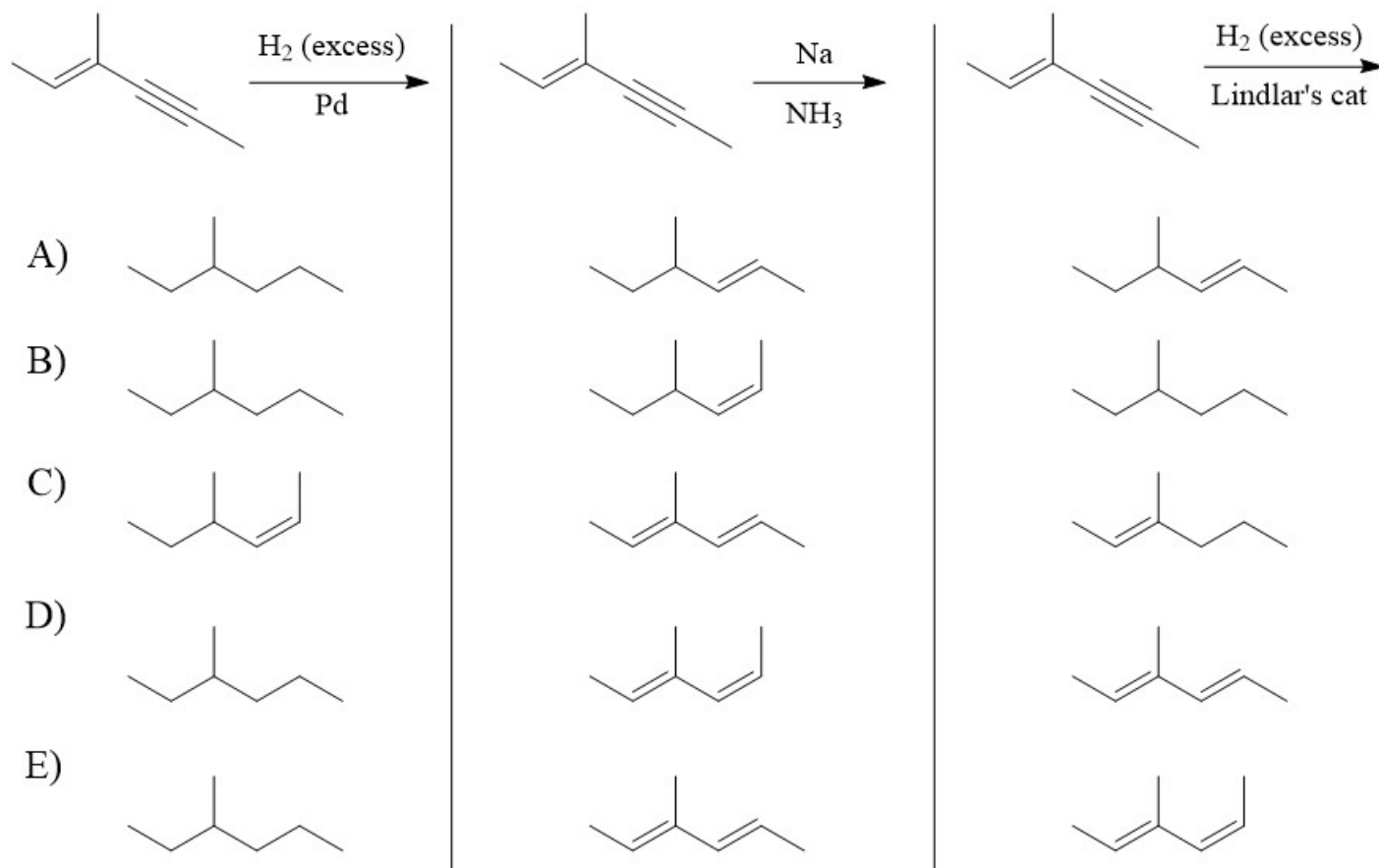


8 Which of the following is the major product of the reaction shown below?



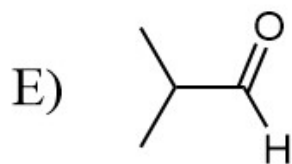
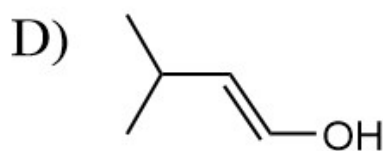
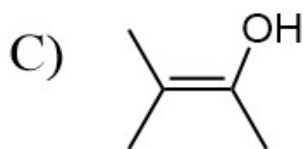
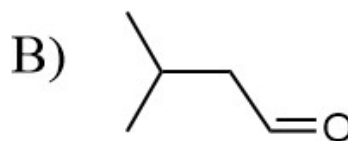
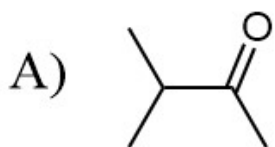
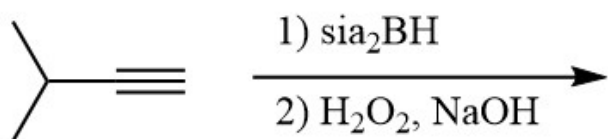
Predict the major products for the following reactions.

1



3

Predict the major product.



Which reagents would be best to achieve the following synthesis?

4



- A) 1) Br₂
2) xs NaNH₂
(H₂O workup)
3) HBr (xs)

- C) 1) Br₂
2) xs NaNH₂
(H₂O workup)
3) Br₂

- B) 1) HBr
2) xs NaNH₂
(H₂O workup)
3) HBr (xs)

- D) 1) HBr
2) xs NaNH₂
(H₂O workup)
3) Br₂

Which is the best set of reagents to accomplish the following transformation?

5



- A) 1) H₂, Lindlar's cat.
2) H₂SO₄, H₂O
HgSO₄

- D) H₂SO₄, H₂O
HgSO₄

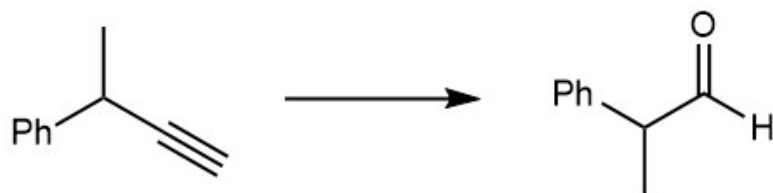
- B) 1) H₂, Lindlar's cat.
2) 9-BBN
3) H₂O₂, NaOH

- E) 1) H₂, Lindlar's cat.
2) O₃
3) DMS

- C) 1) 9-BBN
2) H₂O₂, NaOH

6

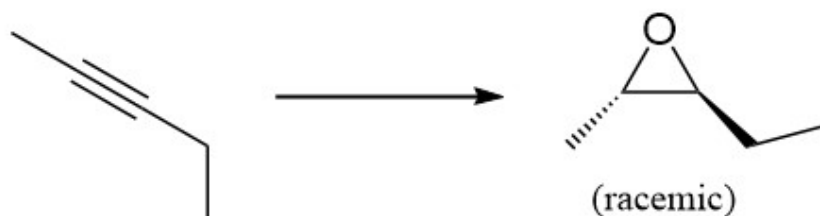
Which is the best set of reagents to accomplish the following transformation?



- A) 1) H_2 , Lindlar's cat.
2) H_2SO_4 , H_2O
 $HgSO_4$
- B) 1) H_2 , Lindlar's cat.
2) 9-BBN
3) H_2O_2 , NaOH
- C) 1) 9-BBN
2) H_2O_2 , NaOH
- D) H_2SO_4 , H_2O
 $HgSO_4$
- E) 1) H_2 , Lindlar's cat.
2) O_3
3) DMS

7

Which reagents would be best to achieve the following synthesis?



- A) 1) Na, NH_3
2) cat. OsO_4 , NMO
- B) 1) H_2 , Lindlar's cat.
2) MCPBA
- C) 1) H_2 , Lindlar's cat.
2) cat. OsO_4 , NMO
- D) 1) Na, NH_3
2) RCO_3H

8

(from the Chemistry GRE practice test)

Which of the following is the major product of the reaction shown below?

