

Name _____

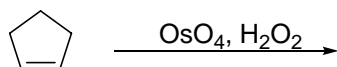
If you do not want your graded quiz placed in the box outside my office, then please tick here _____

(1-10) are True or False.

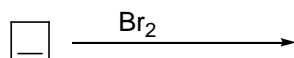
- 1) All alkynes have a carbon-carbon triple bond.
- 2) Alkynes are electron rich and are nucleophiles.
- 3) Alkynes contain sp hybridized carbons.
- 4) The use of a dialkylperoxide as a free radical initiator allows the addition of hydrogen bromide to an alkene double bond to proceed with anti-Markovnikov orientation.
- 5) Hydrogenation (using Lindlar's catalyst) of alkynes gives trans alkenes.
- 6) The addition of HBr to an alkene double bond is an example of nucleophilic elimination.
- 7) A cyclopropane is formed by reaction of an alkene with a carbene.
- 8) Alkynes can exist in Z and E forms.
- 9) Alkenes can exist in Z and E forms.
- 10) The addition of H-O-H to an alkene gives alkyl chlorides with anti-Markovnikov orientation.

(11-15) Draw the products of the following reactions, paying attention to any stereo-/regio-chemistry.

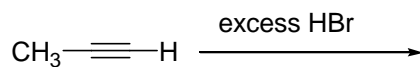
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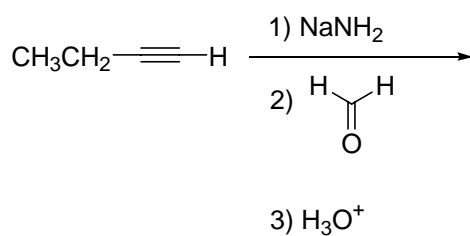
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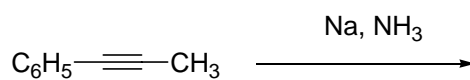
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14)



15)

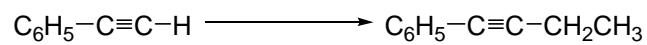


(16-20) Give suitable reagents for the following transformations.

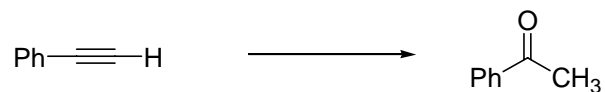
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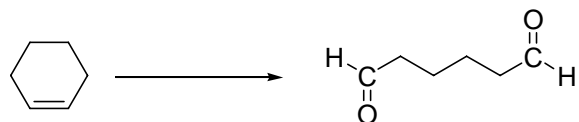
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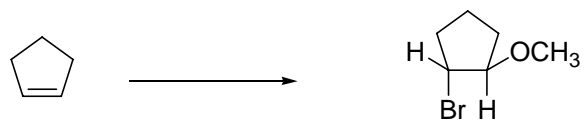
18)



19)



20)



***Bonus Question:** Write the mechanism for the **acid** catalyzed interconversion of keto and enol forms? (up to 2 points).

Name TRIENE TUGO FISSION

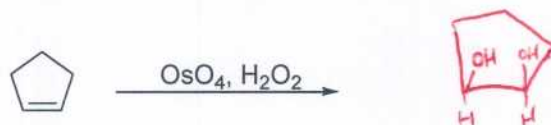
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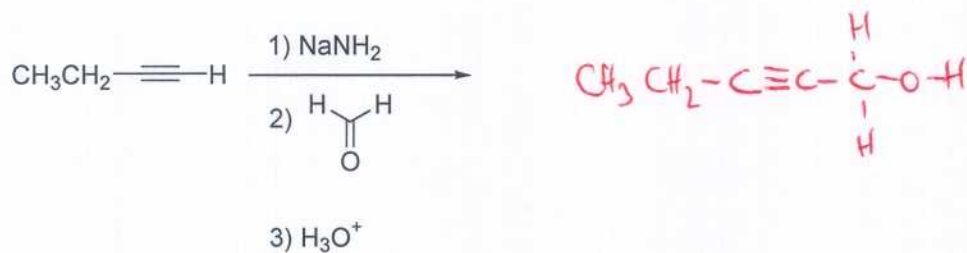
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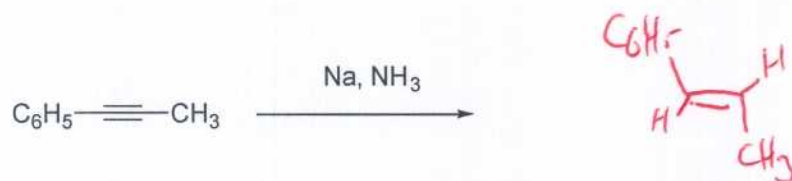
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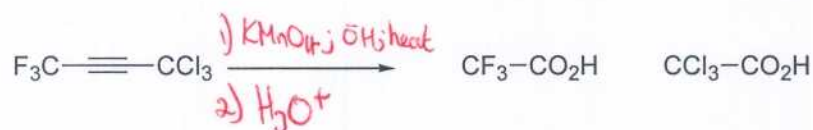


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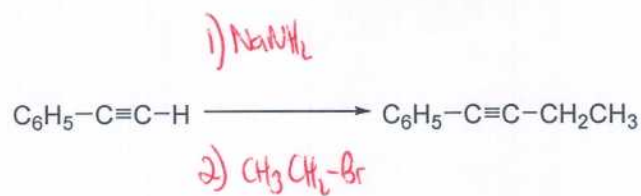


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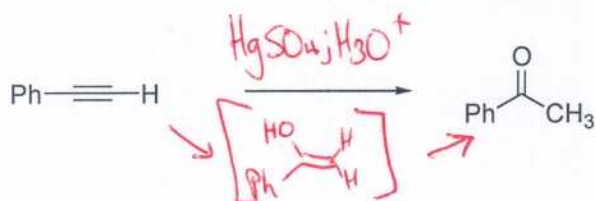
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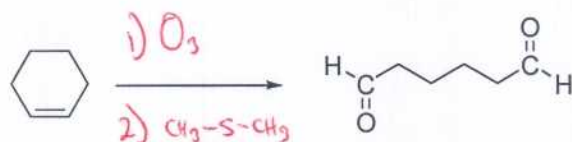
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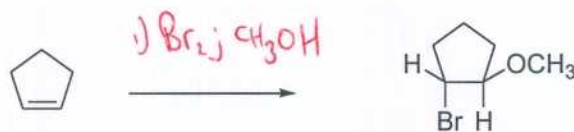
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