

Name _____

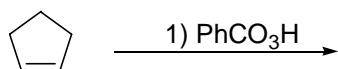
If you do not want your graded quiz placed in the box outside my office, then please tick here _____

(1-10) are True or False.

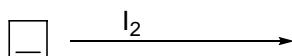
- 1) A carbon-carbon triple bond consists of two σ bonds and one π bond.
- 2) An alcohol contains an sp hybridized oxygen bound to a hydrogen.
- 3) A π bond is stronger than a σ bond.
- 4) Alkenes react with peroxyacids to yield syn 1,2-diols
- 5) The final addition product of 1-butyne and iodine is a saturated tetrachloride.
- 6) Hydroxide ion is a poor leaving group in nucleophilic substitutions.
- 7) A Grignard reagent will react with moist air.
- 8) A Grignard reagent contains Magnesium.
- 9) 2-Pentanol is a chiral alcohol.
- 10) Epoxides are three membered rings.

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

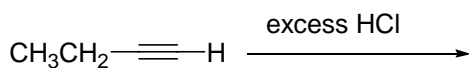
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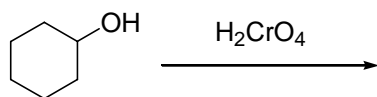
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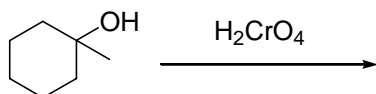
13)



14)

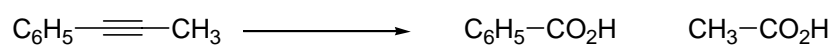


15)

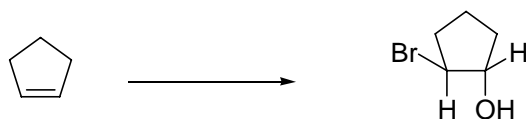


(16-20) Give suitable reagents for the following transformations.

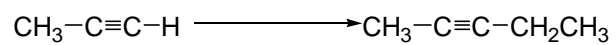
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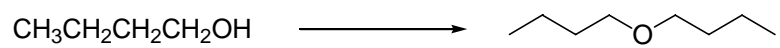
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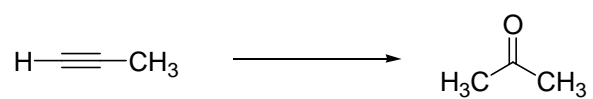
18)



19)



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***Bonus Question:**

Describe how you could convert 2-bromobutane into 2-butyne (in several steps).

Name Zeke N. Yeeshallind.

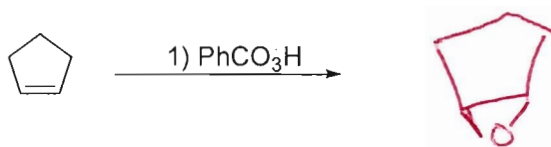
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(1-10) are True or False.

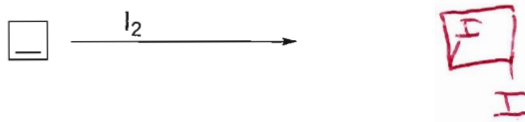
- 1) A carbon-carbon triple bond consists of two σ bonds and one π bond. **F**
- 2) An alcohol contains an sp hybridized oxygen bound to a hydrogen. **F**
- 3) A π bond is stronger than a σ bond. **F**
- 4) Alkenes react with peroxyacids to yield syn 1,2-diols **F**
- 5) The final addition product of 1-butyne and iodine is a saturated tetrachloride. **F**
- 6) Hydroxide ion is a poor leaving group in nucleophilic substitutions. **T**
- 7) A Grignard reagent will react with moist air. **T**
- 8) A Grignard reagent contains Magnesium. **T**
- 9) 2-Pentanol is a chiral alcohol.  **T**
- 10) Epoxides are three membered rings. **T**

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

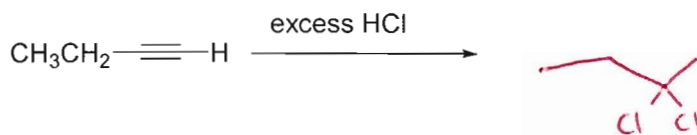
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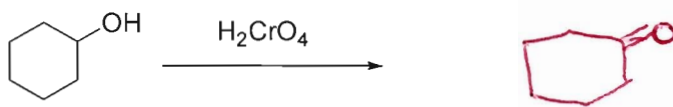
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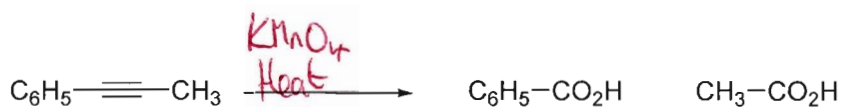


15)



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

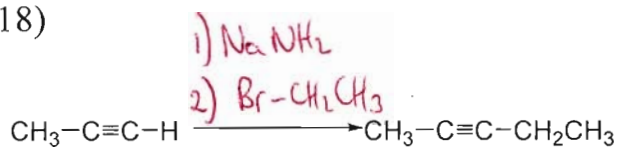
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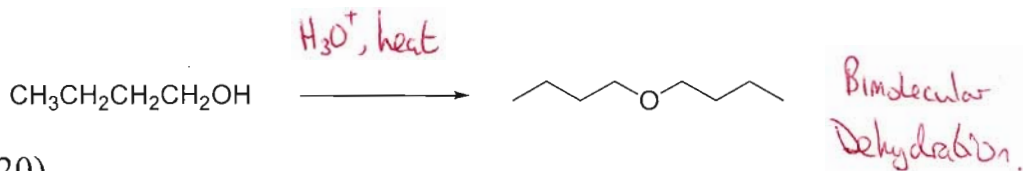
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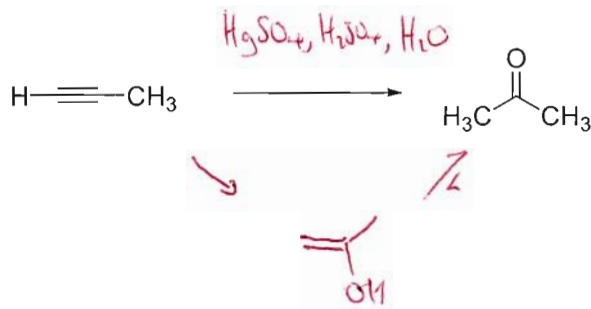
18)



19)



20)



*Bonus Question: 2pts

Describe how you could convert 2-bromobutane into 2-butyne (in several steps).

