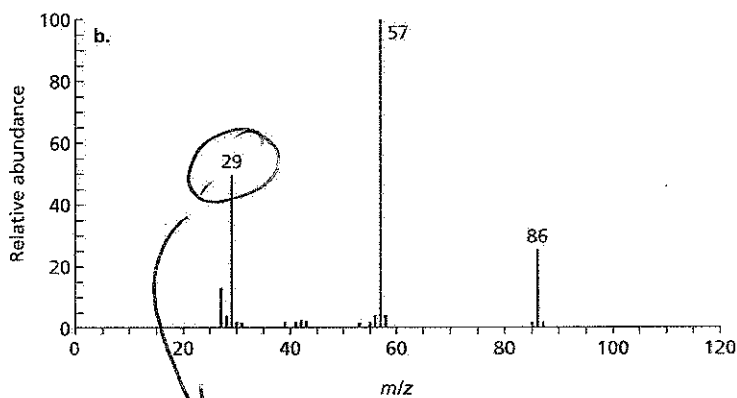


Quiz 5: Monday Afternoon

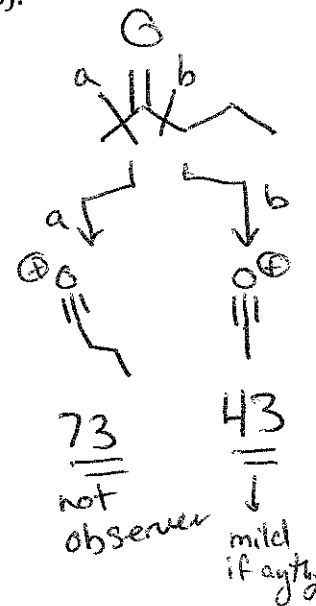
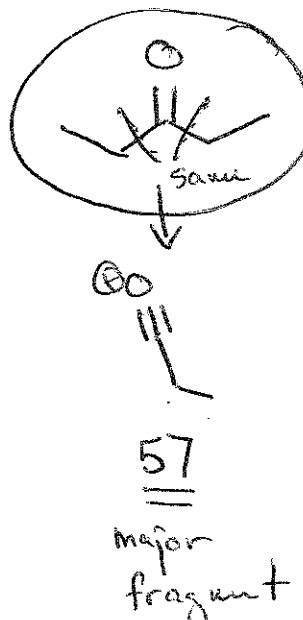
Name: _____

Note: You will have 30 minutes to complete the following quiz.

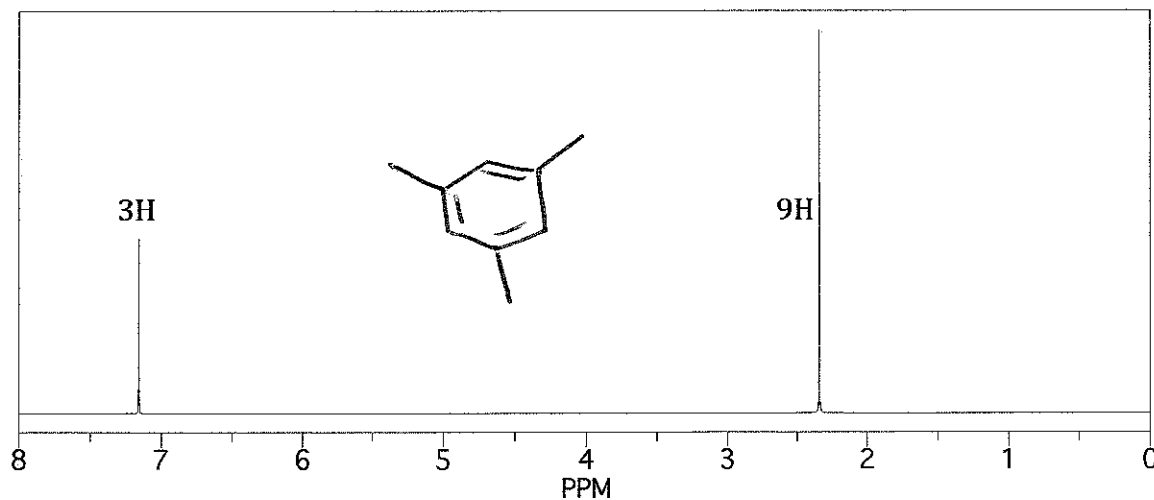
- 1) The following molecule is a mass spec of pentanone ($C_5H_{10}O$) (amu = 86). Use the fragments to predict which isomer of pentanone this is a mass spec of (4 points).



Represents $CH_2CH_3^+$ that could happen in either



- 2) Show a structure for a compound that has the molecular formula C_9H_{12} consistent with the following NMR. (6 points)

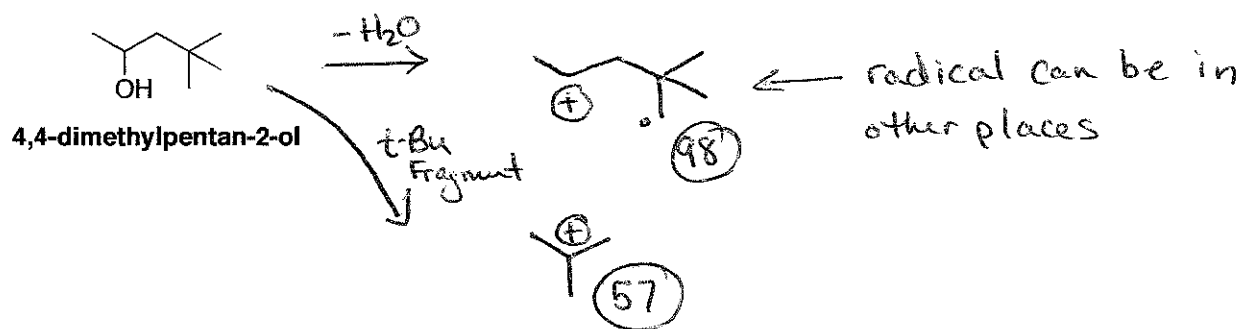


Quiz 5: Monday Morning

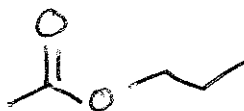
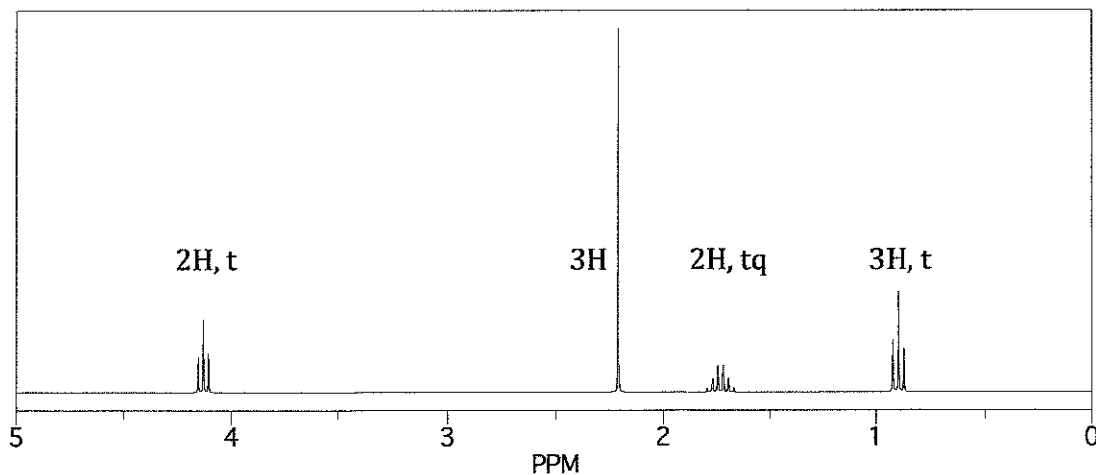
Name:

Note: You will have 30 minutes to complete the following quiz.

- 1) 4,4-dimethylpentan-2-ol (amu = 116) has fragmentation peaks at 98 and 57. What are these peaks? (4 points)



- 2) Show a structure for a compound that has the molecular formula $C_5H_{10}O_2$ consistent with the following NMR. (6 points) (tq = triplet of quartets)

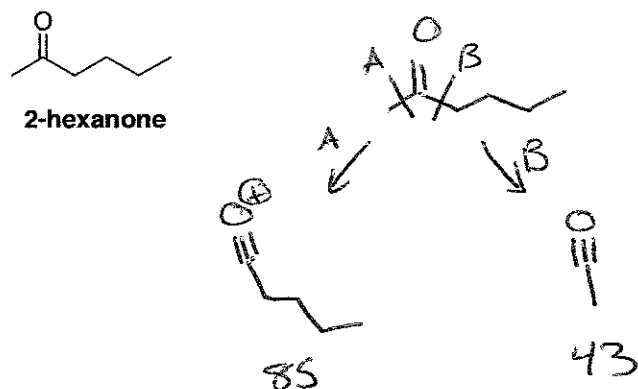


Quiz 5: Friday Morning

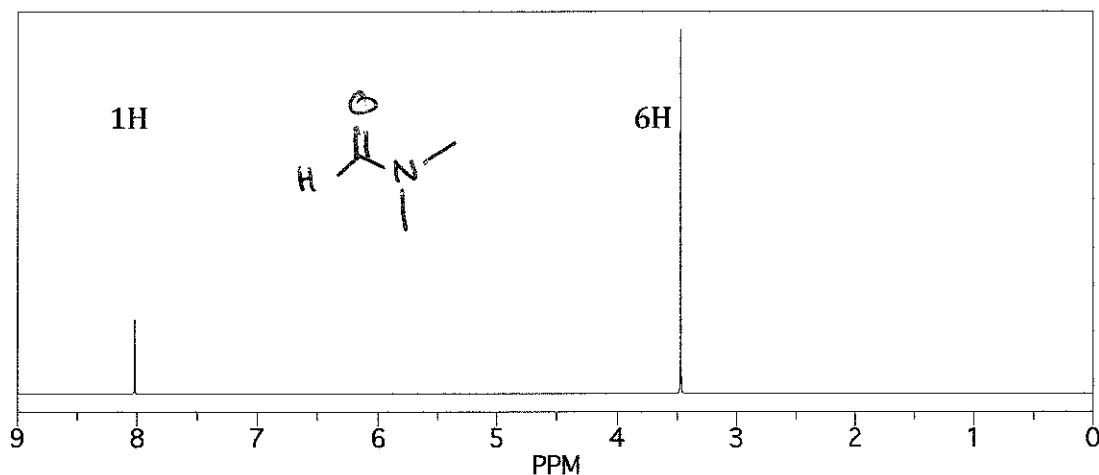
Name:

Note: You will have 30 minutes to complete the following quiz.

1) 2-Hexanone shows 2 fragments at 85 & 43. What are these fragments? (4 points)



2) Show a structure for a compound that has the molecular formula C_3H_7NO consistent with the following NMR (6 points)

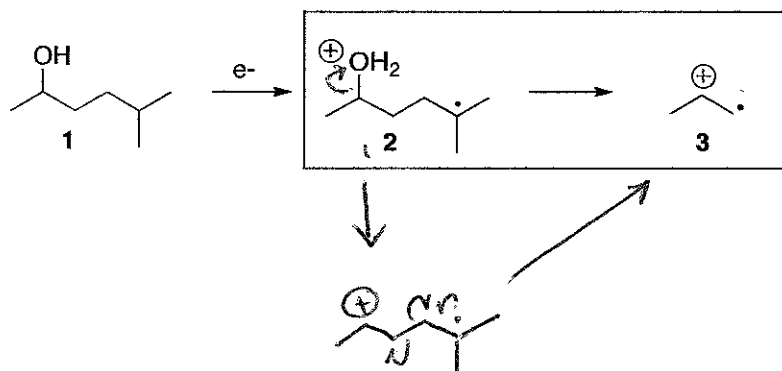


Quiz 5: Wednesday Afternoon

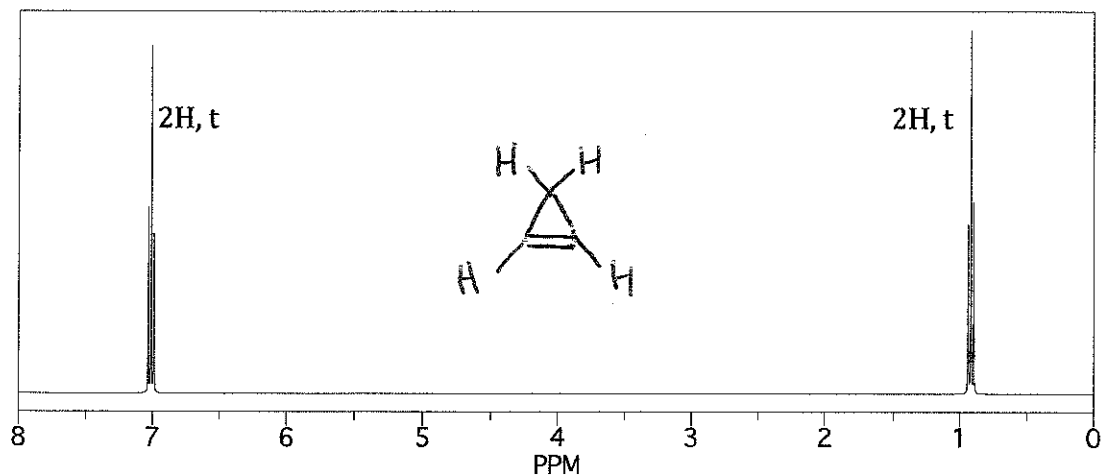
Name:

Note: You will have 30 minutes to complete the following quiz.

1) Show a mechanism for the following fragmentation (2 → 3). (4 points)



2) Show a structure for a compound that has the molecular formula C_3H_4 consistent with the following NMR. (6 points)

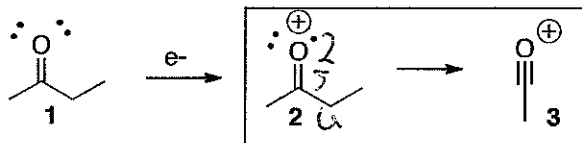


Quiz 5: Wednesday Morning

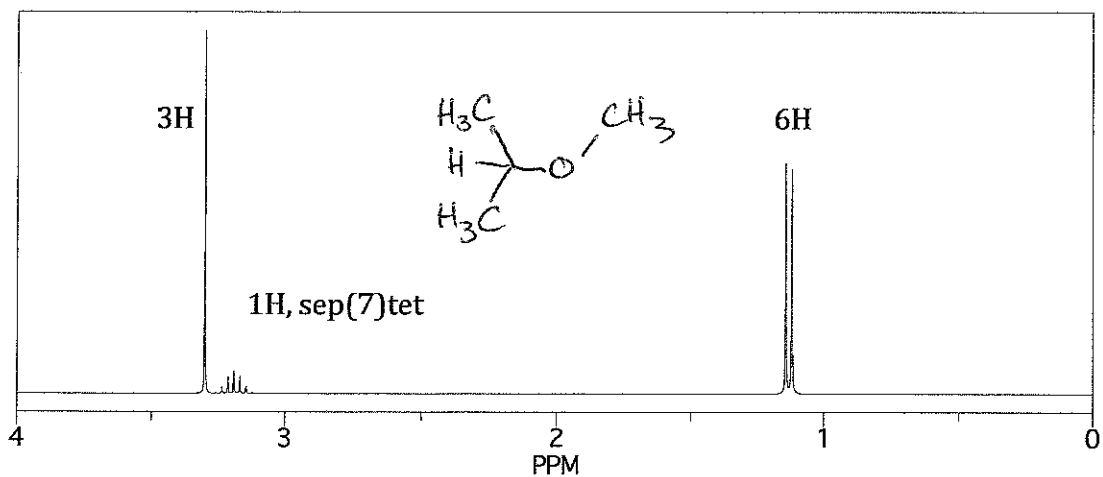
Name:

Note: You will have 30 minutes to complete the following quiz.

1) Show a mechanism for the following fragmentation (2 → 3). (4 points)



2) Show a structure for a compound that has the molecular formula $C_4H_{10}O$ consistent with the following NMR. (6 points)



Handwritten signature or mark.