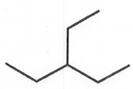
Organic Chemistry I, Spring 2018, Quiz 1a

Name: Answer key

Signature:

The following quiz will begin 5 minutes into recitation and will last for 20 minutes. It consists of 4 questions, 20 points total. Show all of your work in the space provided for partial credit.

1. Provide the IUPAC name of the following molecule (5 points).

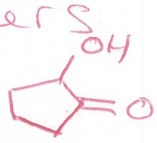


3-ethylpentane

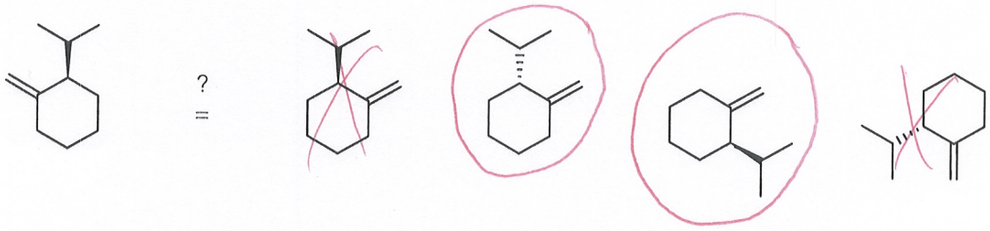
2. Provide a reasonable structure with the formular $C_5H_8O_2$ using line angle notation (5 points).

Various right answers

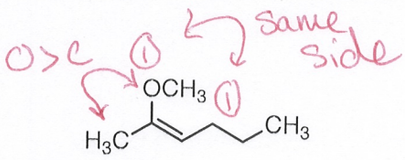
ie



3. Circle the molecule(s) that are identical the the compound to the left (5 points).



4. Assign the stereochemistry (*E*) or (*Z*) to the following alkene (5 points).



same side

(Z)

Organic Chemistry I, Spring 2018, Quiz 1e

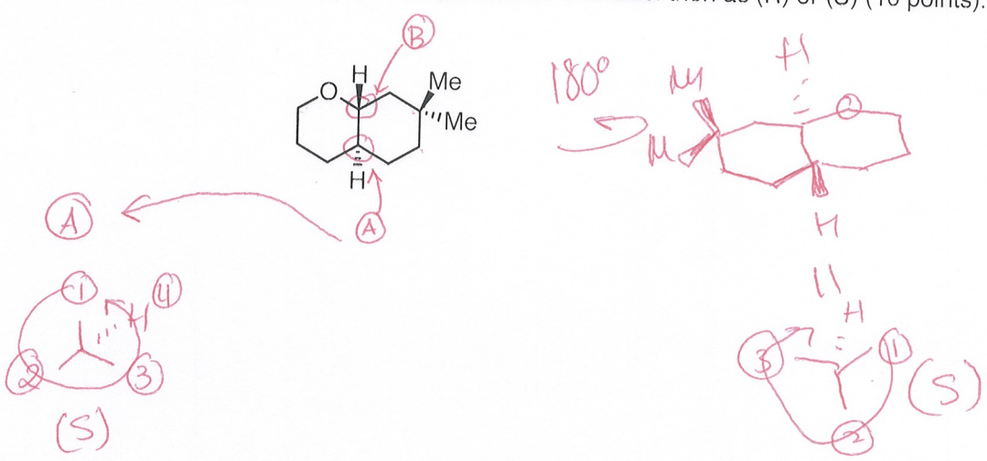
Name: Answer

Signature:

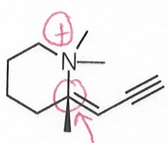
The following quiz will begin 5 minutes into recitation and will last for 20 minutes. It consists of 3 questions, 20 points total. Show all of your work in the space provided for partial credit.

1. Draw the molecle 2-methylhexane using line-angle notation (5 points).

2. Circle all the stereogenic centers on the following molecule and label then as (R) or (S) (10 points).



3. Briefly describe what is wrong about the following structure. There may be more then one thing (5 points).



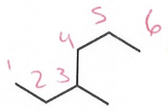
Organic Chemistry I, Spring 2018, Quiz 1b

Name: Answer Key

Signature:

The following quiz will begin 5 minutes into recitation and will last for 20 minutes. It consists of 4 questions, 20 points total. Show all of your work in the space provided for partial credit.

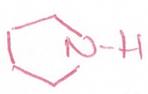
1. Provide the IUPAC name of the following molecule (5 points).



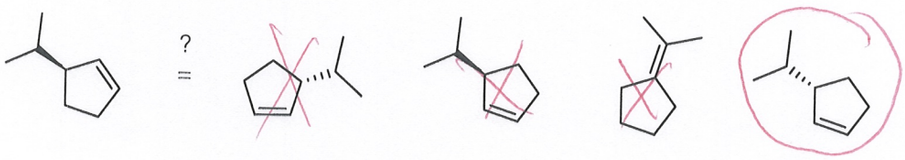
3-methylhexane

2. Provide a reasonable structure with the formular C_4H_9N using line angle notation (5 points).

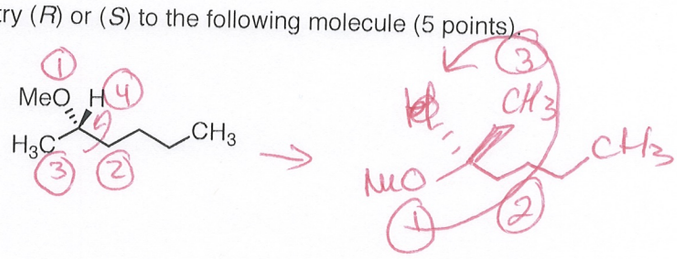
Various right answers. ie →



3. Circle the molecule(s) that are identical the the compound to the left (5 points).



4. Assign the stereochemistry (*R*) or (*S*) to the following molecule (5 points).



Counter Clockwise

(S)

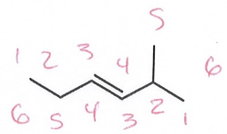
Organic Chemistry I, Spring 2018, Quiz 1c

Name: Answer

Signature:

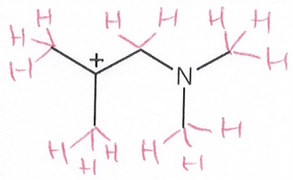
The following quiz will begin 5 minutes into recitation and will last for 20 minutes. It consists of 4 questions, 20 points total. Show all of your work in the space provided for partial credit.

1. Provide the IUPAC name of the following molecule (5 points).

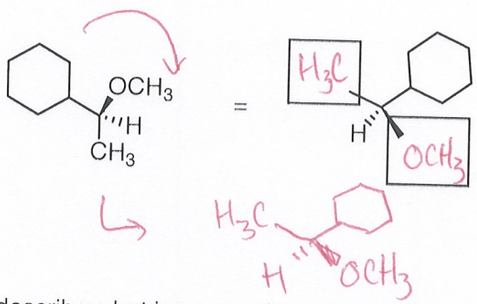


2-methyl-3-hexene or 2-methylhex-3-ene

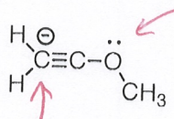
2. Draw in all of the hydrogens and lone pairs in the following line-angle structure (5 points).



3. Place the appropriate appendages in the boxes provided (5 points).



4. Briefly describe what is wrong about the following structure. There may be more then one thing. (5 points).



4e⁻, Oxygen should either have lone pair or be 2⊕ charge

5 bonds, 10 e⁻

Organic Chemistry I, Spring 2018, Quiz 1d

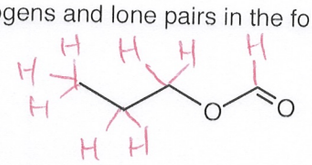
Name: Answer

Signature:

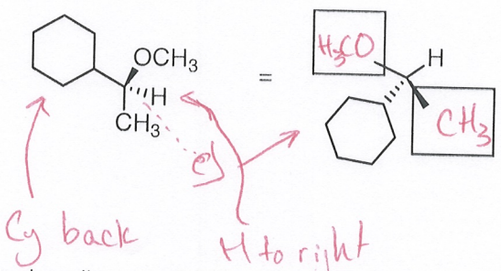
The following quiz will begin 5 minutes into recitation and will last for 20 minutes. It consists of 4 questions, 20 points total. Show all of your work in the space provided for partial credit.

1. Draw the molecle (Z)-2-hexene using line-angle notation (5 points).

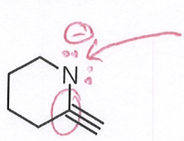
2. Draw in all of the hydrogens and lone pairs in the following line-angle structure (5 points).



3. Place the appropriate appendages in the boxes provided (5 points).



4. Briefly describe what is wrong about the following structure. There may be more then one thing (5 points).



nitrogen can't be neutral here. likely -1 charge, w/ 2 lone pairs.

10 e⁻, 5 bonds (ie, wrong charge (O) should be -1, and too many electrons)