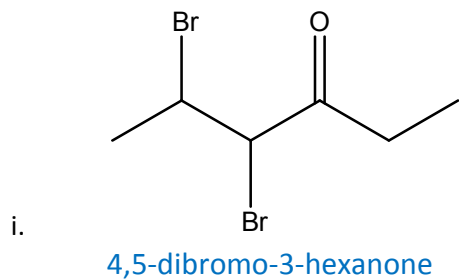
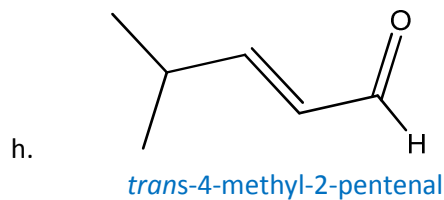
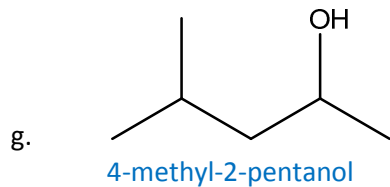
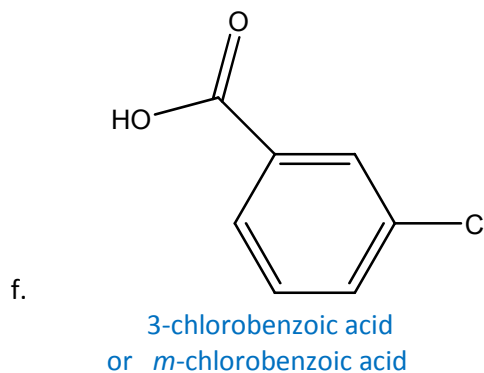
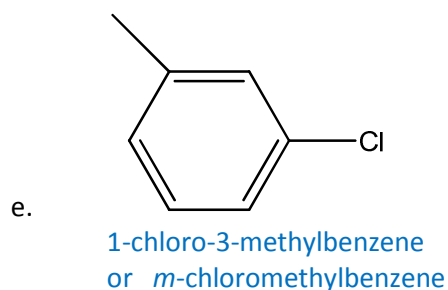
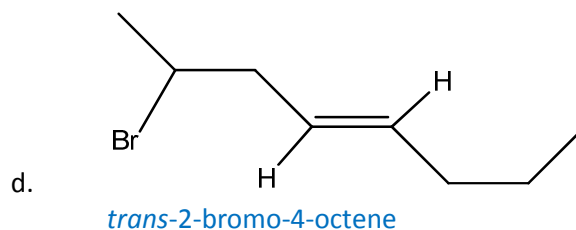
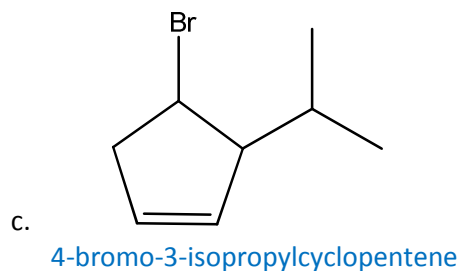
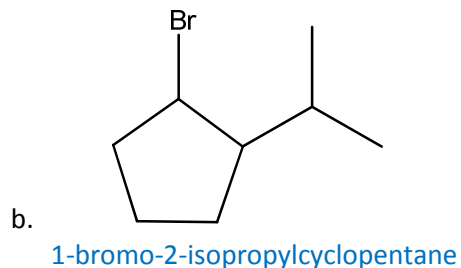
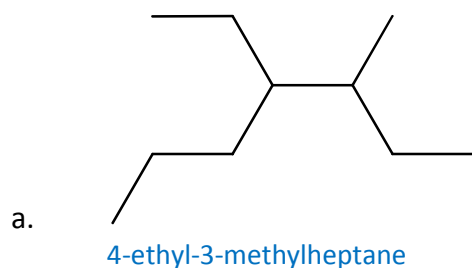


## Questions for Review - Answers

Chem 1C Chapter 21, Spring 09, Lingwood

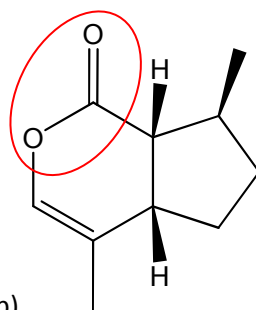
For the final, study using all of the following: this document, the previous questions for review, the previous exams and homeworks, and the questions in the emails and lecture slides.

1. Give the systematic name for the following compounds



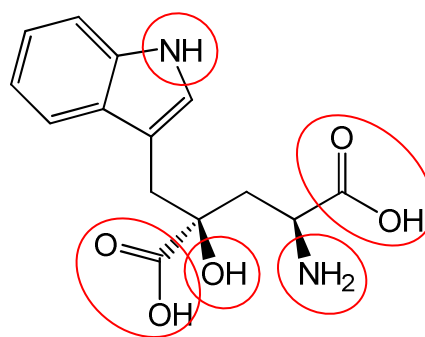
2. What functional groups are present in the following compounds?

a. Nepetalactone (the active ingredient of catnip)



An Ester is present

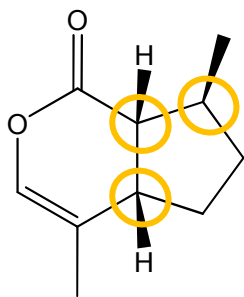
b. Monatin (a naturally-occurring sweetener)



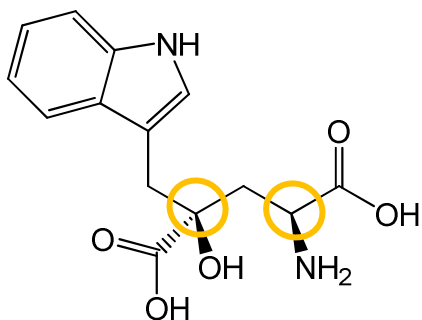
Clockwise from top: Amine, Carboxylic Acid, Amine, Alcohol, Carboxylic Acid

3. How many chiral carbons does each of the molecules in question 2 contain?

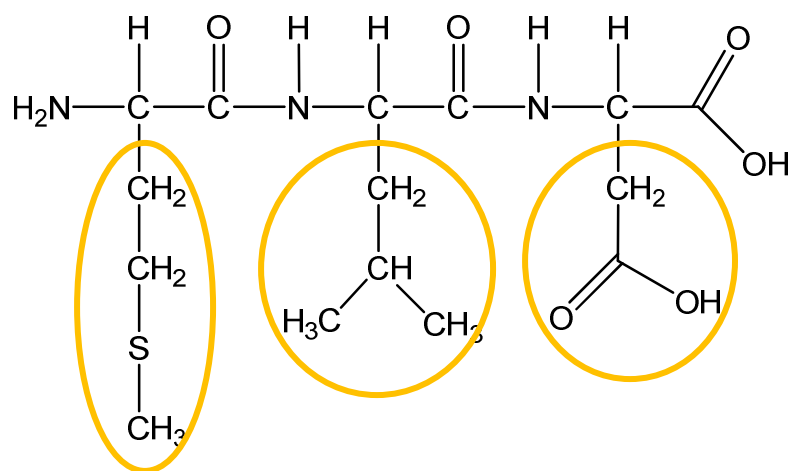
Nepetalactone has 3 chiral carbons



Monatin has 2 chiral carbons



4. What is the amino acid sequence of the following tripeptide?



**met-leu-asp**

For Reference,

Gly -H

Ala - $\text{CH}_3$

Tyr - $\text{CH}_2$ -phenyl-OH

Asp - $\text{CH}_2$ -(C=O)-OH

Glu - $\text{CH}_2$ - $\text{CH}_2$ -(C=O)-OH

Met - $\text{CH}_2$ - $\text{CH}_2$ -S- $\text{CH}_3$

Leu - $\text{CH}_2$ -CH-( $\text{CH}_3$ ) $_2$