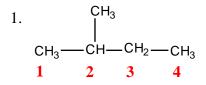
#### ORGANIC CHEMISTRY WOORKSHEET ON NOMENCLATURE

#### Chemistry 112

#### I. Alkanes

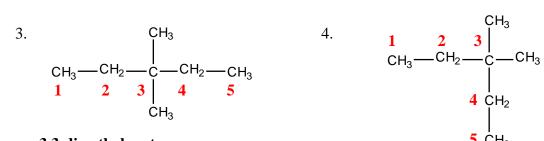
a. Give the IUPAC name for each of the following:



2. CH<sub>3</sub> CH<sub>3</sub>
CH<sub>3</sub> CH—CH—CH<sub>3</sub>

## 2-methylbutane

### 2,3-dimethylbutane



#### 3,3-dimethylpentane

## 3,3-dimethylpentane

# 7-ethyl-2,2-dimethyl-4-propylnonane

6.

## 4-isopropyl-3-methylheptane

- b. Write the structural formula for each of the following:
  - 1. 2,3,4-trimethyloctane

2. 2,3-dimethylbutane

3. 2,4-dimethyl-4-ethylheptane

4. 1,3-dipropylcyclohexane

# II. Alkenes and Alkynes

a. Give the IUPAC name for each of the following:

3-methyl-3-hexene

2. 
$$\frac{1}{CH_3}$$
  $\frac{2}{C}$   $\frac{3}{C}$   $\frac{4}{C}$   $\frac{5}{CH_2}$   $\frac{5}{CH_3}$ 

2-pentyne

b. Write the structural formula for each of the following: