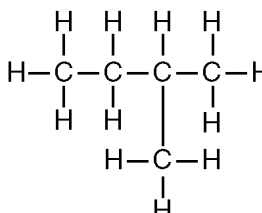
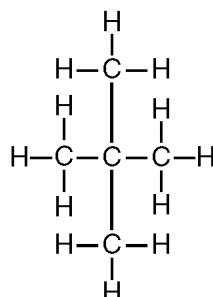
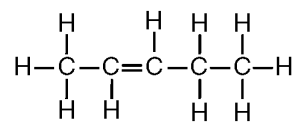
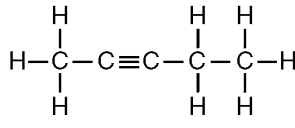
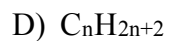
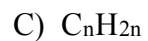


1. A carbon-carbon triple bond is found in a molecule of
- A) butane B) butanone
C) butene D) butyne
2. Which compound is an alkyne?
- A) C_2H_2 B) C_2H_4
C) C_4H_8 D) C_4H_{10}
3. Which general formula represents the compound CH_3CH_2CCH ?
- A) C_nH_n B) C_nH_{2n}
C) C_nH_{2n-2} D) C_nH_{2n+2}
4. Given the structural formula:
 $H-C \equiv C-H$
What is the total number of electrons shared in the bond between the two carbon atoms?
- A) 6 B) 2 C) 3 D) 4
5. Which formula represents propyne?
- A) C_3H_4 B) C_3H_6
C) C_5H_8 D) C_5H_{10}
6. Which structural formula represents 2-pentyne?
- A)  B) 
- C) 
- D) 
7. Given the structural formula for ethyne:
 $H-C \equiv C-H$
What is the total number of electrons shared between the carbon atoms?
- A) 6 B) 2 C) 3 D) 4
8. The general formula for the alkyne series is
- A) C_nH_n B) C_nH_{2n-2}
C) C_nH_{2n} D) C_nH_{2n+2}
9. Which series of hydrocarbons contains one triple covalent bond?
- A) alkyne B) alkadiene
C) alkane D) alkene
10. Which molecule contains a triple covalent bond?
- A) C_2H_2 B) C_2H_4 C) C_3H_6 D) C_3H_8
11. What is the total number of pairs of electrons shared between the two adjacent carbon atoms in an ethyne molecule?
- A) 1 B) 2 C) 3 D) 4
12. If a hydrocarbon molecule contains a triple bond, its IUPAC name ends in
- A) "-ane" B) "-ene"
C) "-one" D) "-yne"
13. Which compound is a member of the series which has the general formula C_nH_{2n-2} ?
- A) ethane B) ethene
C) ethyne D) ethanol
14. What is the number of hydrogen atoms in a molecule of ethyne?
- A) 6 B) 2 C) 8 D) 4
15. Which set of formulas represents alkenes?
- A) C, CH_4 , CH_4O B) C_2H_4 , C_3H_6 , C_4H_8
C) C_2H_2 , C_2H_4 , C_2H_6 D) CH_2 , CH_3 , CH_4
16. What is the total number of bonds between adjacent carbon atoms in an ethyne molecule?
- A) 1 B) 2 C) 3 D) 5
17. Which molecule contains a triple covalent bond between adjacent carbon atoms?
- A) C_2H_4 B) C_2H_2 C) C_3H_6 D) C_3H_8
18. Which hydrocarbon is a member of the series with the general formula C_nH_{2n-2} ?
- A) ethyne B) ethene
C) butane D) benzene

19. Which general formula represents the homologous series of hydrocarbons that includes the compound 1-heptyne?



20. Which compound is an unsaturated hydrocarbon?

A) hexanal

B) hexane

C) hexanoic acid

D) hexyne
