

問1 次の化学英語を和訳せよ。

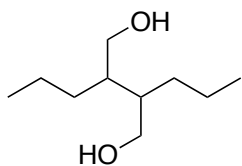
- (1) reflux (2) product (3) sulfide (4) polar (5) resonance structure
(6) recrystallization (7) reaction (8) molecule (9) stopper (10) reactivity

問2 次の英文を和訳せよ。

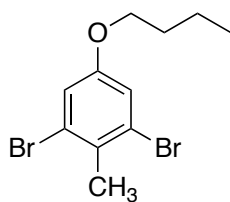
- (1) Carbon can bond to fewer than four atoms by forming one or more multiple bonds.
(2) Note that each carbon in ethylene is bonded to three atoms (one carbon and two hydrogens) but can bond to one additional atom after one bond of the carbon-carbon double bond is broken.
(3) The chains in normal alkanes are not really straight but zig-zag, because the tetrahedral C-C-C angle is 109.5° .
(4) The alkane with six carbon atoms can be written as $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3$ which can be condensed to $\text{CH}_3(\text{CH}_2)_4\text{CH}_3$.
(5) Notice that the molecule contains fourteen hydrogen atoms in addition to the six carbon atoms.

問3 次の化合物を英語で命名せよ。ただし、特性基が主基となるための順位は、カルボン酸>エステル>アルデヒド>ケトン>アルコール>チオール>アミンの順である。

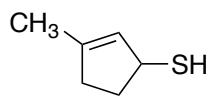
(1)



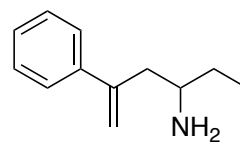
(2)



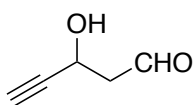
(3)



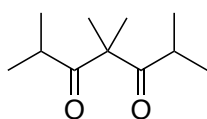
(4)



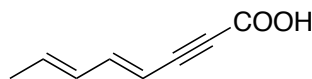
(5)



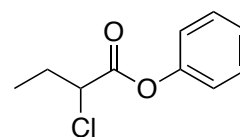
(6)



(7)



(8)



問4 次の名前の化合物の構造を記せ。

2-[(3-ethylcyclohex-1-enyl)sulfanyl]-7-(2-fluorohex-2-en-4-ynyl)-1-[4-(1-methylethyl)hex-5-enyl]naphthalene