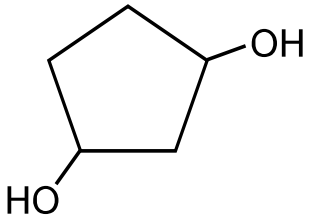
PRACTICE
Organic Chemistry Lesson 4: Alcohols and Ethers

1. Name the following compounds.

(a) $CH_3CH_2CH_2OH$

(b) $CH_3CH_2CH_2CH_2CH_2OCH_3$

(c) $CH_3CH_2\underset{\displaystyle OH}{\underset{|}{C}}HCH_2\overset{\displaystyle CH_3}{\overset{|}{C}}HCH_3$

(d) 

(e) $CH_3CH_2CH{=}CHCH_2CH_2\overset{\displaystyle OCH_2CH_2CH_2CH_3}{\overset{|}{C}}HCH_3$

2. Draw the structure for each of the following compounds.
   (a) 5-bromoheptan-2-ol
   (b) 2-methylpentan-3-ol
   (c) 2-methoxybutane
   (d) cyclobutanol
   (e) 4-ethoxycyclohex-1-ene

3. Most gasoline sold in Ontario contains about 10% ethanol. Write the balanced chemical equation for the complete combustion of ethanol.

4. Write the structural equation for each of the following reactions. Include any special conditions. Name the product of each reaction.
   (a) dehydration of propan-2-ol
   (b) substitution reaction between propan-2-ol and hydrogen bromide
   (c) condensation reaction with methanol