REVIEW QUESTIONS

Chapter 22

1. Name each alcohol shown below, using the IUPAC system:

a) CH₃—CH—CH₂—CH—CH₃

b) CH₃ CH₃ CH₃ | CH₃—CH₂—CH—CH—CH₂—OH

CH₃ CH₃ CH₂—CH—CH₂—OH

d) H_3C CH_3 CH_3

2. Classify each as primary, secondary or tertiary alcohols.

a) CH₃—CH—CH₂—CH₂—OH

C) OH _____CH₃ _____

 3. Complete each of the reactions shown below. If reactions produce more than one isomer, draw structure for each isomer and indicate which is the major product.

a)
$$CH_3$$
— CH_2 — CH_2 — CH_2 — $OH \frac{H^+}{Heat}$

b)
$$CH_3$$
— CH_2 — CH — CH_2 — CH_3 H^+
Heat

$$\begin{array}{ccc} & \text{OH} & & \\ & | & \\ \text{C} & \text{CH}_3 - \text{CH}_2 - \text{CH} - \text{CH}_3 & & \\ & & \underline{\quad | \text{O} |} & \end{array}$$

d)
$$CH_3$$
 CH_3 — CH — CH_2 — CH_2 — OH OI

e)
$$CH_3-CH_2-C-CH_3$$
 CH_3 CH_3

f)
$$CH_3$$
— CH_2 — CH — CH_3 H^+
Heat