Άσκηση 23.15

α)

$$13{,}7g\ RBr \text{ ή } \underset{(A)}{C_vH_{2v+1}Br} + NaOH \xrightarrow{\text{υδατ.}} 7{,}4g\ C_vH_{2v+1}OH + NaBr$$

$$n_A = \frac{13{,}7}{14v+81} \qquad n_B = \frac{7{,}4}{14v+18}$$

$$C_vH_{2v+1}Br + NaOH \rightarrow C_vH_{2v+1}OH + NaBr$$

$$(1mol \qquad 1mol)$$

$$\frac{13{,}7}{14v+81} \qquad \frac{7{,}4}{14v+18} \Rightarrow \frac{13{,}7}{14v+18} = \frac{7{,}4}{14v+18} \Rightarrow v=4$$

Άρα: A: C_4H_9Br B: C_4H_9OH

β)

$$\underset{(\Gamma)}{ROH} \xrightarrow{SOCl_2} \underset{(\Delta)}{RCl} \xrightarrow{Mg} \underset{(E)}{RMgCl}$$

$$+$$

$$HC\equiv CH + H_2O \xrightarrow[HgSO_4]{H_2SO_4} \underset{(Z)}{CH_3CH=O}$$

$$\downarrow$$

ενδ. ηρ.

$$\downarrow +H_2O$$

$$CH_3-\underset{OH}{CH}-R \quad (B) \quad (C_4H_9OH)$$

Άρα: R: CH_3-CH_2-

Οπότε:

Γ: CH_3CH_2OH Δ: CH_3CH_2Cl E: CH_3CH_2MgCl

Z: $CH_3CH=O$

B: $CH_3-\underset{OH}{CH}-CH_2-CH_3$

A: $CH_3-\underset{Br}{CH}-CH_2-CH_3$