# ALKAN ELDESİ VE REAKSİYONLARI İLE İLGİLİ SORULAR

1. Aşağıdaki Würtz sentezi ile ilgili reaksiyonları tamamlayınız. Çoklu ürün oluşturan reaksiyonlarda üç ürünün açık formülünü göstererek, IUPAC adını yazınız (son iki maddeyi isimlendirmeyiniz).

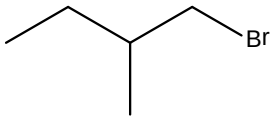
a) $n\text{-}C_4H_9Cl + Na \xrightarrow{\text{susuz eter}}$

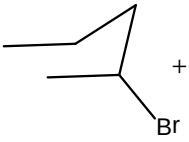
b) $izo\text{-}C_4H_9Cl + Na \xrightarrow{\text{susuz eter}}$

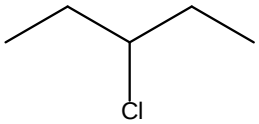
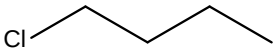
c) $tert\text{-}C_4H_9Cl + Na \xrightarrow{\text{susuz eter}}$

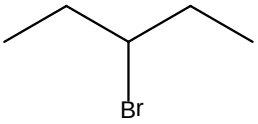
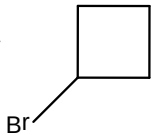
d) $sec\text{-}C_4H_9Cl + Na \xrightarrow{\text{susuz eter}}$

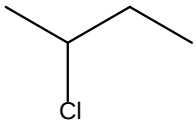
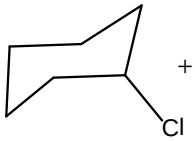
e) $sec\text{-}C_4H_9Cl + n\text{-}C_4H_9Cl + Na \xrightarrow{\text{susuz eter}}$

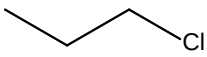
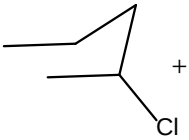
f)  + Na $\xrightarrow{\text{susuz eter}}$

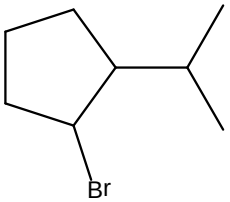
g)  + Na $\xrightarrow{\text{susuz eter}}$

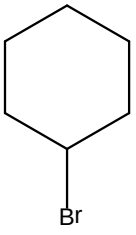
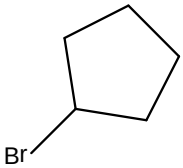
h)  +  + Na $\xrightarrow{\text{susuz eter}}$

i)  +  + Na $\xrightarrow{\text{susuz eter}}$

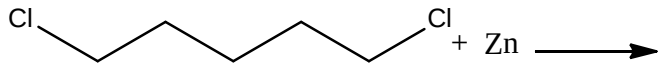
j)  +  + Na $\xrightarrow{\text{susuz eter}}$

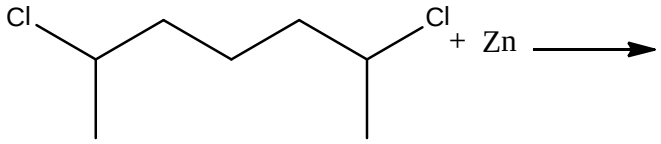
k)  +  + Na $\xrightarrow{\text{susuz eter}}$

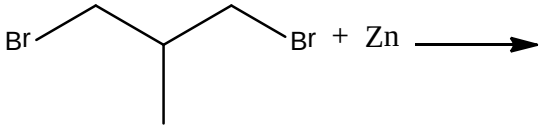
l)  + Na $\xrightarrow{\text{susuz eter}}$

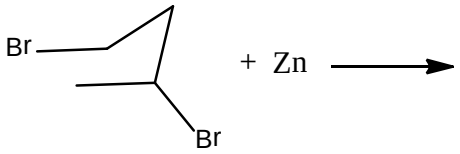
m)  +  + Na $\xrightarrow{\text{susuz eter}}$

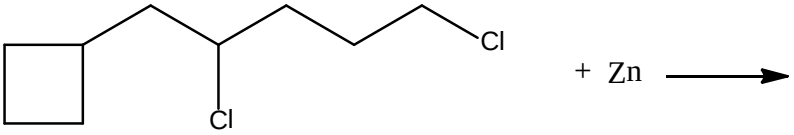
2. Aşağıdaki siklik alkan sentezi ile ilgili reaksiyonları tamamlayınız. Reaksiyonlarda oluşan ürünün açık formülünü göstererek, IUPAC adını yazınız (son maddeyi isimlendirmeyiniz).

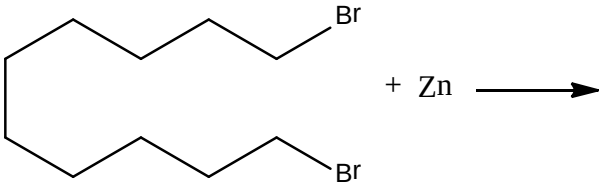
a) 

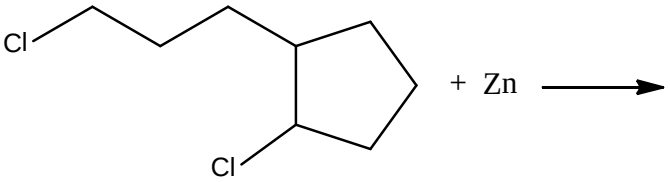

b) 

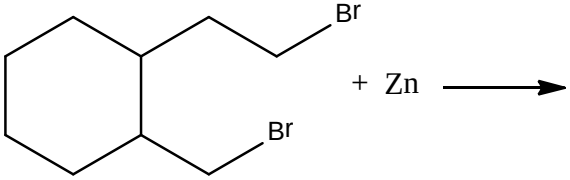

c) 


d) 


e) 


f) 


g) 


h) 

3. Aşağıdaki alkanların UV ışık altında klorlanması reaksiyonunda alkanın mol sayısı aşırı tutularak, reaksiyon monoklorlama aşamasında durduruluyor. Aşağıdaki reaksiyonların her birinde oluşabilecek monokloralkanların açık formülünü göstererek, IUPAC adını yazınız.

a) Bütan
b) Siklobütan
c) metilsiklobütan
d) Etilsiklobütan
e) Izopropilsiklobütan
f) t-butilsiklobütan
g) 1,3-metilsiklobütan
h) 1,3-metilsiklopentan
i) Etilsiklopentan
j) Izopropilsiklopentan
k) t-butilsiklopentan
l) 1,3-metilsikloheksan