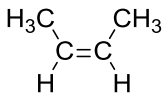
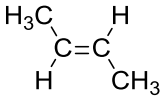
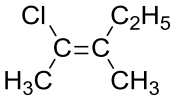
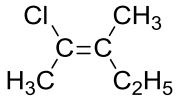
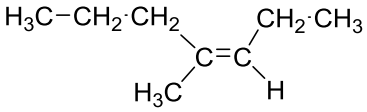
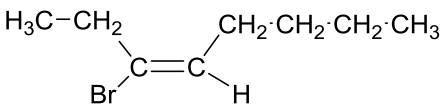
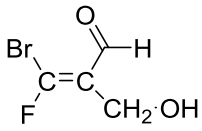
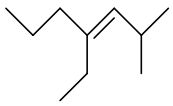
4. BÖLÜMLE İLGİLİ SORULAR

1). Yapı izomeri, stereoizomer, enantiyomer, diastereomer, kiral molekül, akiral molekül, stereomerkez, simetri düzlemi, optikçe aktif bileşik, mezo bileşik ifadelerinin tanımlayınız.

2). Aşağıdaki bileşikleri adlandırınız.

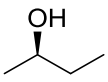





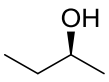
3). Aşağıdaki bileşikleri adlandırınız.

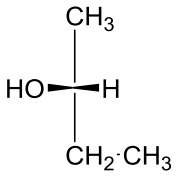
4). (R)-2-butanol ve (S)-2-butanol yapılarının formüllerini;

a) üç boyutlu olarak yazınız

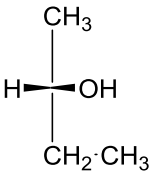

(*R*)-2-butanol


(*S*)-2-butanol

b) Fischer projeksiyonuyla çiziniz.

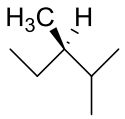


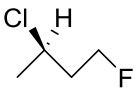
(*R*)-2-butanol

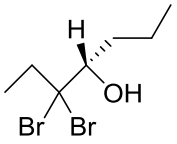


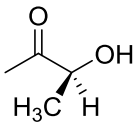
(*S*)-2-butanol

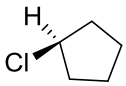
5). Aşağıdaki enantiyomerlerin konfigürasyonlarını (*R* ya da *S*) belirleyiniz.

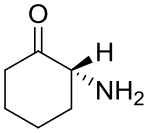


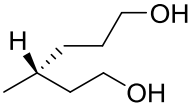










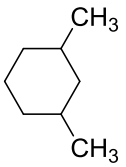


6). Siklohekzanın konformerlerini ve 1,3 diaksiyel etkileşimi açıklayınız.

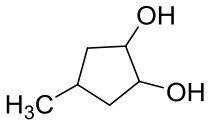
7). Bütanın bütün Newman izdüşümlerini ve enerji diyagramanı yazınız.

8). Aşağıdaki bileşiklerin mezo şeklini ve simetri düzlemini gösteriniz.

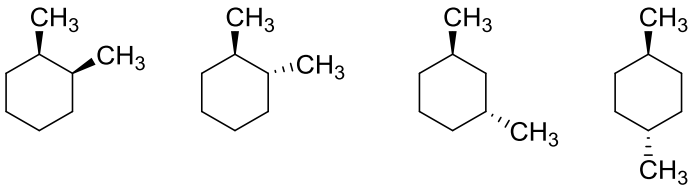
a)



b)



9). Aşağıdaki verilen bileşiklerde her kiral merkezi *R* ya da *S* olarak belirtiniz.



10). Aşağıdaki bileşiklerin molekül formülleri $C_5H_{12}O$ dur. Bunlardan hangileri kiraldir.