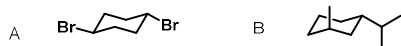
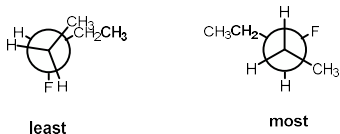


White test

1. B
2. D
3. D
4. C, D, E
5. C
6. D
7. A, B, C
8. D
9. B
10. B
11. C, D
12. B, C, E
13. B, D
14. A, C, E
15. B, C
16. C
- 17.



18.

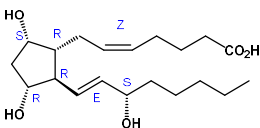




19. Enantiomers, diastereoisomers, same

20.



21.



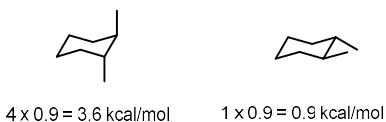
22. Nucleophiles: $\text{CH}_3\text{CH}_2\text{O}^-$, H_2O ,  Electrophiles: H^+ , BH_3 , 

23. (6*R*, 2*Z*)-6-chloro-2-fluoro-2-heptene

R-5-methyl-2-hexanol

(3*R*, 4*S*)-3,3-dibromo-1-methylcyclohexene

24.



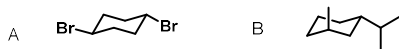
Difference in energy = $3.6 - 0.9 = 2.7 \text{ kcal/mol}$

Blue Test

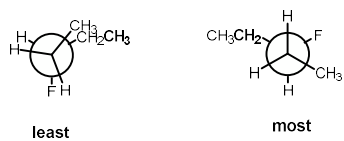
1. A, B, C
2. D
3. C, D, E
4. C
5. D
6. B
7. D
8. D
9. B, C, E
10. B, D
11. A, C, E
12. B, C
13. C
14. B
15. B
16. C, D
17. Enantiomers, diastereoisomers, same
- 18.



19.

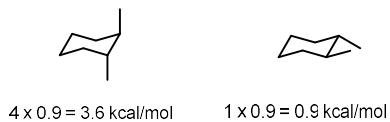


20.



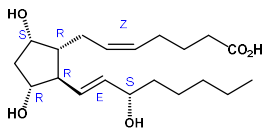
21. (6*R*, 2*Z*)-6-chloro-2-fluoro-2-heptene
R-5-methyl-2-hexanol
 (3*R*,4*S*)-3,3-dibromo-1-methylcyclohexene

22.



Difference in energy = $3.6 - 0.9 = 2.7 \text{ kcal/mol}$

23.



24. Nucleophiles: $\text{CH}_3\text{CH}_2\text{O}^-$, H_2O ,

Electrophiles: H^+ , BH_3 ,