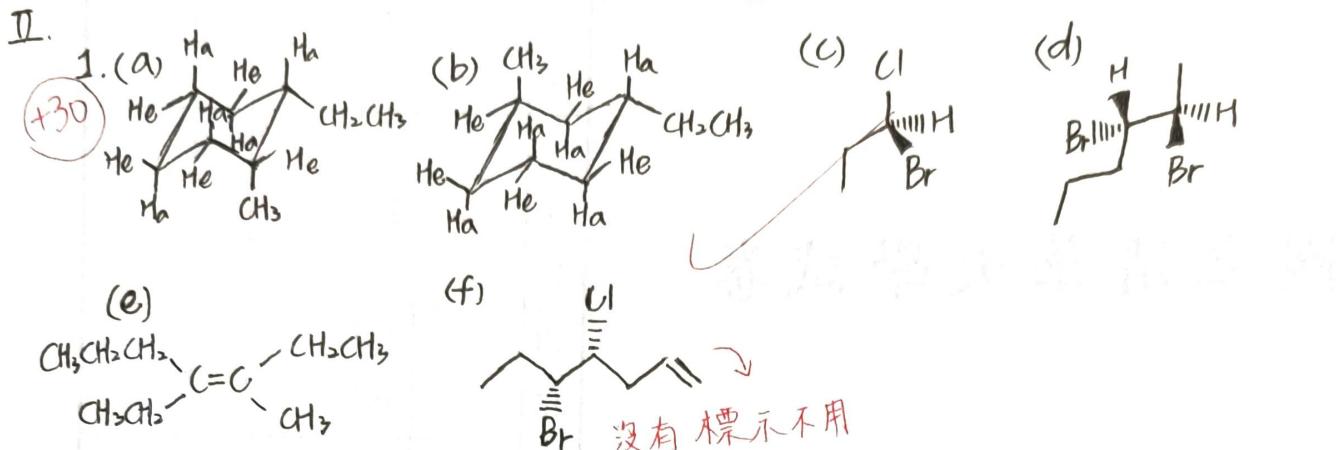


E

I.

1 D	2 E	3 B	4 B	5 D	6 B	7 E	8 C	9 B	10 D
11 C	12 D	13 D	14 C	15 D	16 A	17 A	18 D	19 E	20 C
21 E	22 A	23 A	24 B	25 B	26 D	27 D	28 C	29 A	30 B



2 (3S,6S)-  
(a) 6,7-dimethyl-3-octanol +2.5

(b) 5-ethyl-2-methylcyclohexanol (1R,2S,5R) +2.5

(c) 2,4-hexanediol +2.5

(2S,4R)-2,4-hexanediol

(d) (2S,3S,4R)-2-bromo-4-methyl-3-hexanol ✓ +5

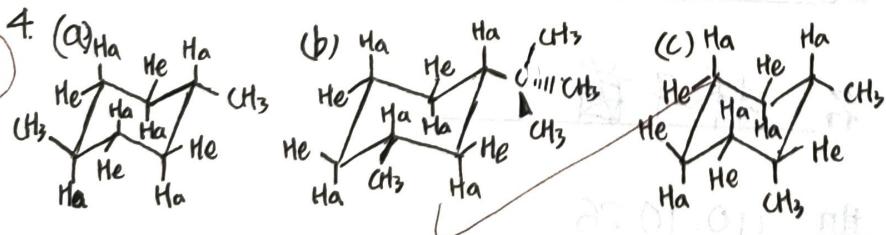
(e) 2-ethyl-5,5-dimethyl-1-hexene ✓ +5

(f) 3R-3-bromo-2-methylcyclohexene

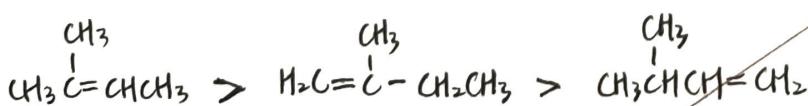
3. (a), (c) are shown chiral

+24 (b), (f) are not shown chiral, but they are meso compounds.

(d), (e) are not shown chiral, and they are not meso compounds.



5. (a) stability



(b) 雙鍵所接的烷基級數  
愈高則愈穩定

8. (a) C, E (b) B, D, F (c) step 2 (d) step 2  
 +9  
 E → F → G

9. a. S e. (1R, 2R)  
 b. S f. R  
 c. S g. (2R, 3R)  
 d. (2R, 3S) h. S

+16 6. (a)  $(03+62)-(101+85) = -21$

+8  $\Delta H = 85 - (62 + 103) = -80 \text{ kcal/mol}$

