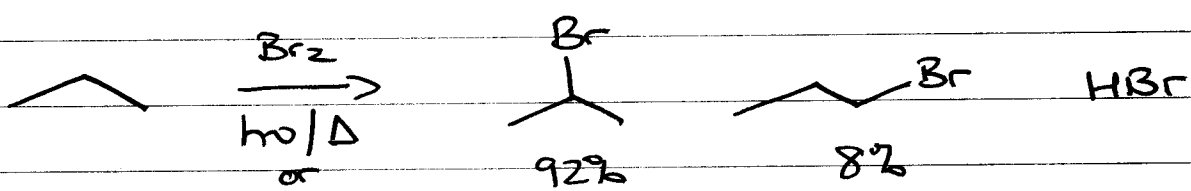
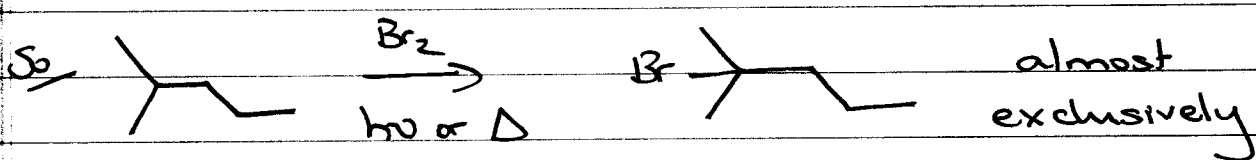


② REGIOSELECTIVITY

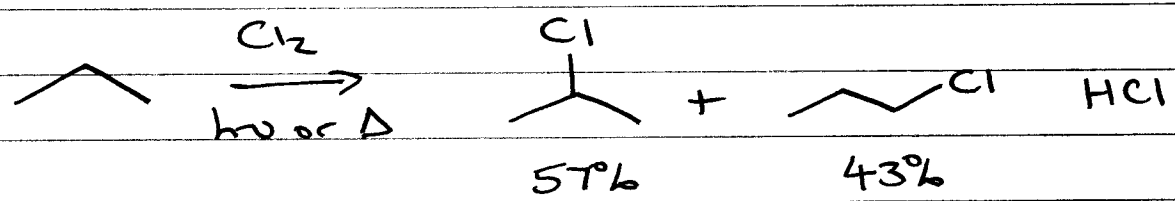


statistics 25 : 75

2° favored over 1° (also 3° favored over 2°)



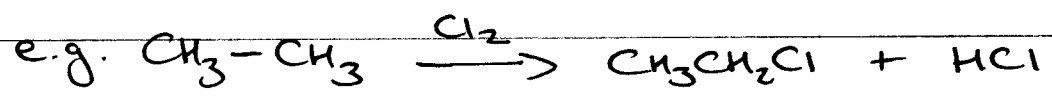
REGIOSELECTIVITY less for Cl₂



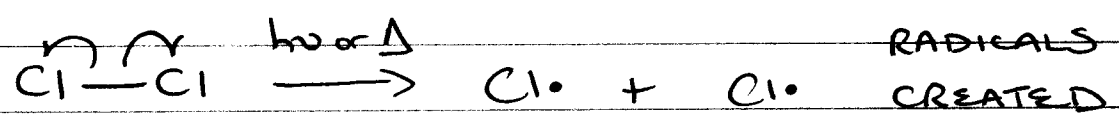
	3°	2°	1°
Br ₂	1600	80	1
Cl ₂	5	4	1

③ MECHANISMS

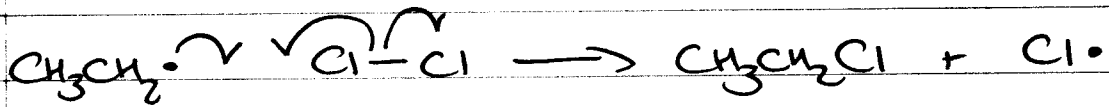
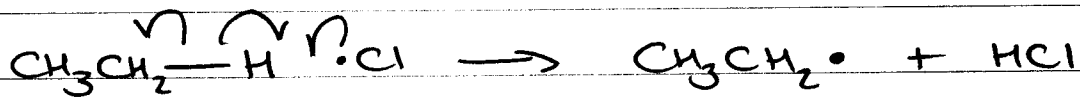
3 steps: INITIATION / PROPAGATION / TERMINATION



(i) CHAIN INITIATION

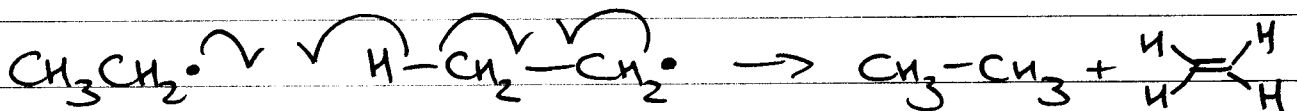
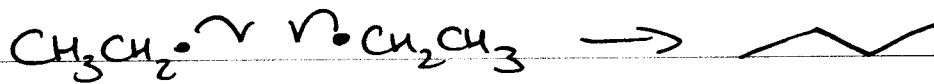


(ii) CHAIN PROPAGATION



PROPAGATES RADICALS

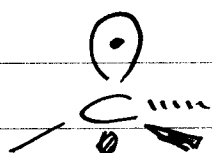
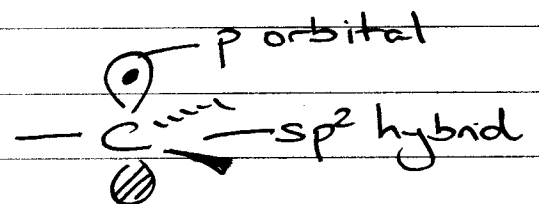
(iii) CHAIN TERMINATION



CONSUMES RADICALS

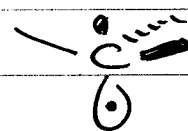
CHAIN PROPAGATION happens many times before termination → number of cycles is called the CHAIN LENGTH.

(4) RADICAL STRUCTURE

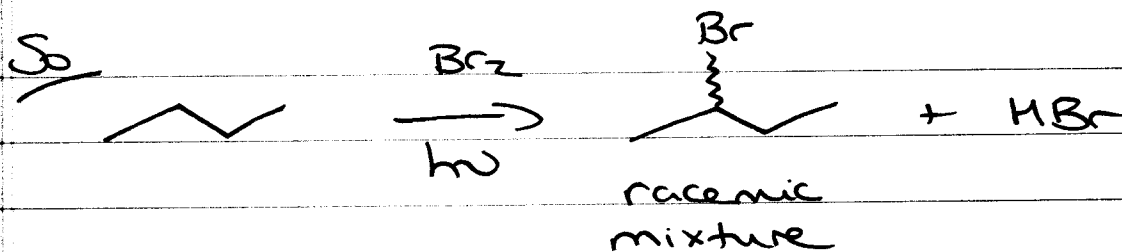


RAPID INVERSION

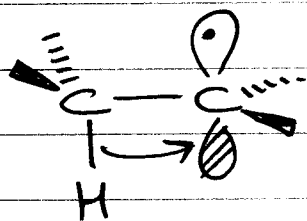
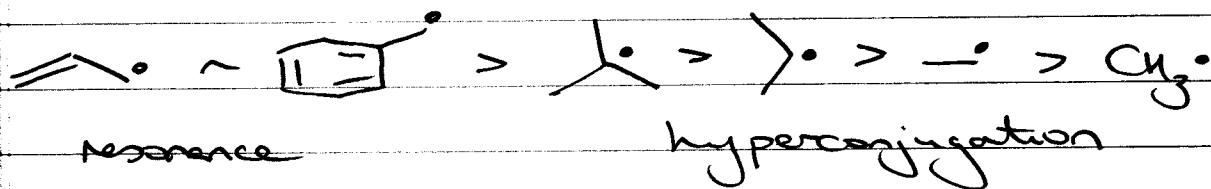
(shallow pyramid)



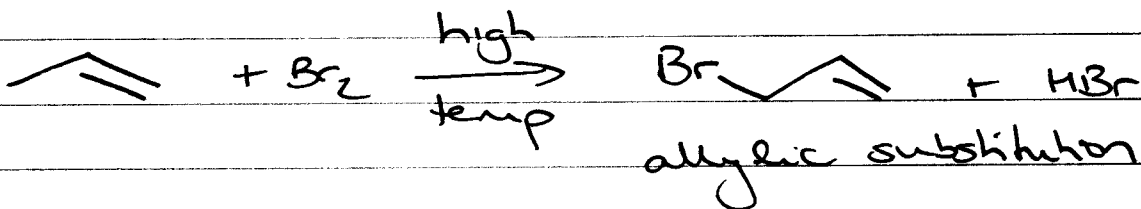
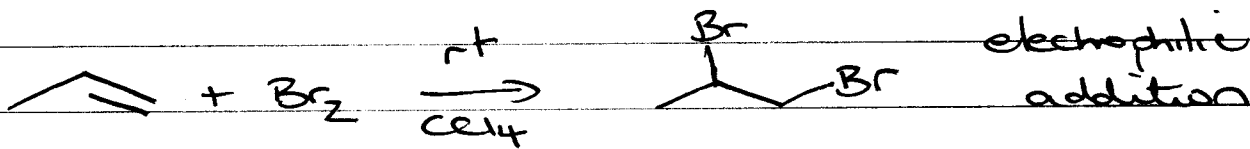
SHALLOW PYRAMID



STABILITY (same trend as e^+)



⑤ ALLYLIC HALOGENATION



more convenient reagent O=C1NC(=O)C1Br (NBS)

reaction can be done at RT

