

Notes on Road Map Problems

Chapter 6 is in red Chapter 7 is in blue Chapter 8 is in light green Chapter 9 is in gold Chapter 10 is in magenta Chapter 11 is in dark green

Legends to Road Map

(A) Markovnikov addition

- (B) Anti-addition
- (C) Anti-Markovnikov addition
- (D) Syn-addition
- (E) Works well for CH<sub>3</sub> and 1° alkyl halides
- (F) Cis-alkenes as products
- (G) *Trans*-alkenes as products
- (H) Reactivity of C-H bonds follows  $3^{\circ} > 2^{\circ} > 1^{\circ}$
- (I) Works for  $CH_3$ , 1°, and 2° alkyl halides
- (J) Works for 2° and 3° alkyl halides, may see rearrangements
- (K) Works for all alkyl halides except CH<sub>3</sub>, and the X and H to be eliminated must be anti-periplanar
- (L) PBr<sub>3</sub> and SOX<sub>2</sub> works on Me, 1°, and 2° R-X's, HX can give rearrangements
- (M) For primary alcohols
- (N) For secondary alcohols

In the problem in chapter 9, tell them to use table 9.1

In chapter 6 problem tell them not to use reaction 10

In chapter 7 problem tell them not to use reaction 4, 5, 6, and 10

In chapter 8 problem tell them not to use reaction 3

In chapter 9 problem tell them not to use entry 7 of table 9.1, and not to use reaction 3 and 5

In chapter 10, do not use rxns 1, 2, 7, 12 and 13

In chapter 11 do not use rxns 2, 8, and 12