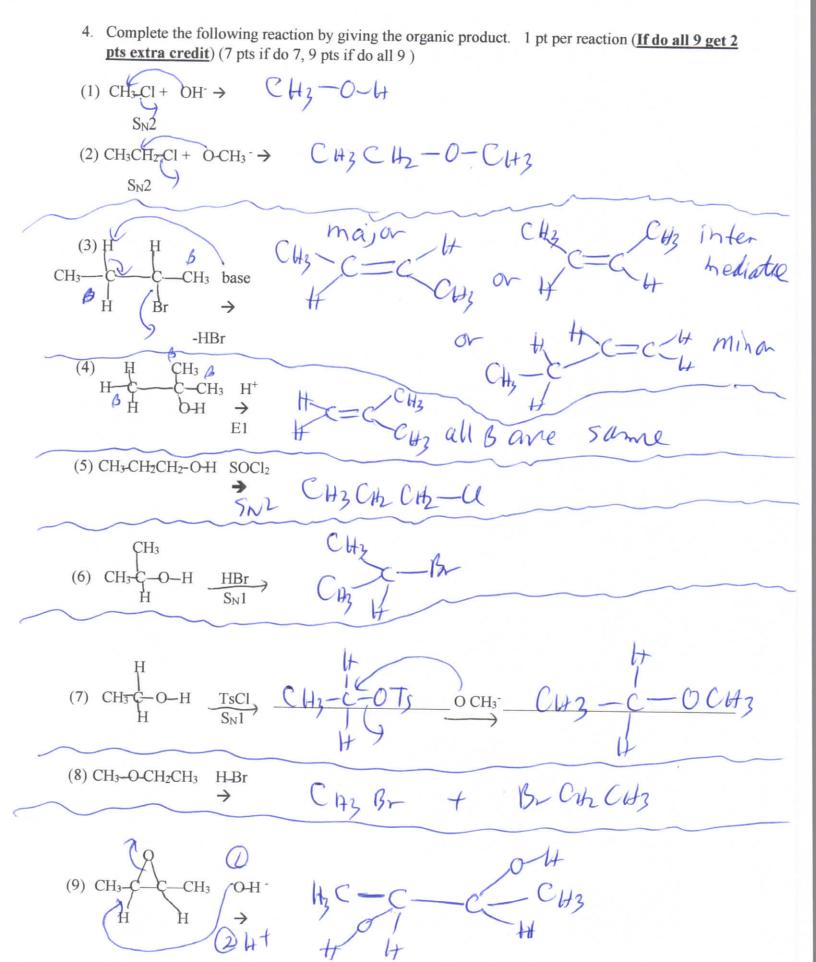
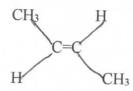
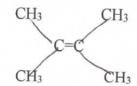
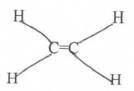
Organic Chemistr	y I (SC 320) Fall 17	Dr. Hahn MW	VF Quiz IV 11/1	W Exam #	
Name	Lax		Print Name		
1. Considering Zaitsev's law, put in order from most stable to least stable by labeling each blank by (most stable) (medium stable) (least stable) (3 pts)					
CH ₃ H		CH ₃	CH ₃	H_C=C	Н
H C	H ₃	CH ₃	CH ₃	H	AH
nedun		mos	+	leas	4
noble	_	Sto	the	Stat	le
 Complete an <u>E1</u> reaction mechanism for the reaction of the following. Give the mechanism to the major product. (must show intermediate OR transition state) (12 pts) 					
CH ₂ C	CH ₃ —H + H ⁺ →		CH2CU3	L	
CH₃—C–Q CH₃	$-H + H \rightarrow$	C H3 -	CH2CU3 C-0€4	-620	
th HB	H-C43	base	C 43 17	CH3	
H-C	\mathbb{R}^{d} \mathbb{R}^{d}	ajon >	#> -	_[(alkere
H	C 43		#	CH3	
	0056				product
	(mirodus)	H		C	more stall
	H	>c-CH	3 diel	1: / /	minon
	H C=c>	Cila	alken	li Enterd)	product
3. Name the following		Chi			less stable
0-CH ₃ -CH ₂	2 i 1 7 C	hept	land to	Lowe well	st priority
CH ₃ H	он 5-1	methoxy	-6-meth	yl)	or #P
metha	byl h	eptan.	- 2-01		



1. Considering Zaitsev's law, put in order from most stable to least stable by labeling each blank by (most stable) (medium stable) (least stable) (3 pts)







2. Complete an <u>E1</u> reaction mechanism for the reaction of the following. Give the mechanism to the major product. (must show intermediate OR transition state) (12 pts)

$$CH_2CH_3$$
 CH_3
 CH_3
 CH_3

3. Name the following: (3 pts)

- 4. Complete the following reaction by giving the organic product. 1 pt per reaction (<u>If do all 9 get 2</u> <u>pts extra credit</u>) (7 pts if do 7, 9 pts if do all 9)
- (1) CH_3 - $CI + OH^- \rightarrow S_N 2$
- (2) $CH_3CH_2-C1 + O-CH_3 \rightarrow S_N2$
- (3) H H CH_3 C C CH_3 base CH_3 C C
 - $(4) \quad \begin{array}{cccc} H & CH_3 \\ H & C CH_3 & H^+ \\ H & O H & \rightarrow \\ & E1 \end{array}$

-HBr

- (5) CH₃-CH₂-O-H SOCl₂
 →
- (6) CH₃-C-O-H HBr S_N1
- (7) $CH_{\overline{3}}C O H$ $T_{\overline{5}}CI$ $O CH_{\overline{3}}$ $O CH_{\overline{3}}$
- (8) CH₃-O-CH₂CH₃ H-Br →
- (9) CH₃-C-CH₃ O-H →