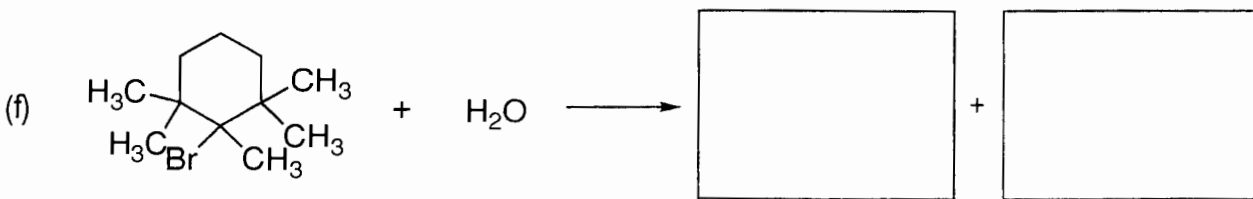
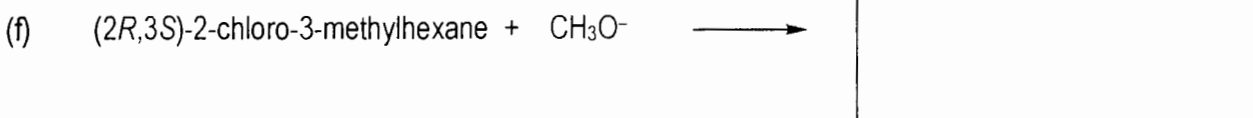
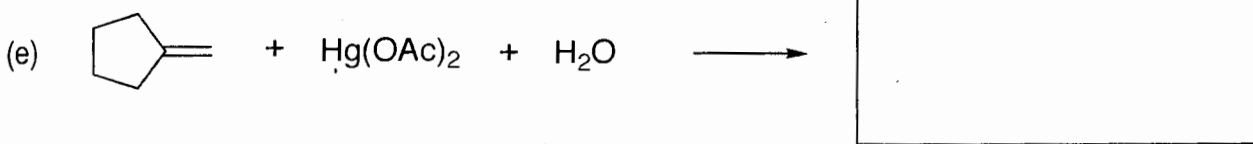
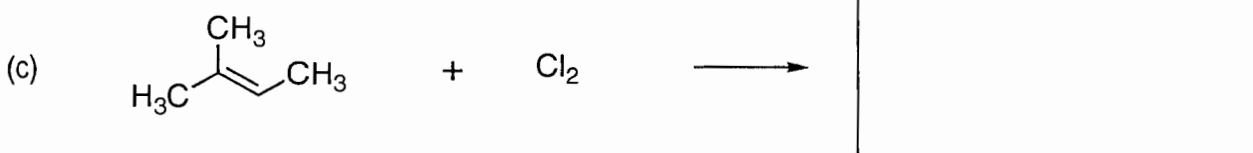
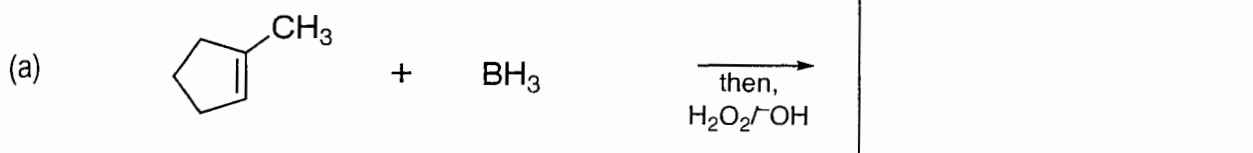
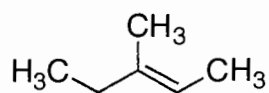


Mid Term 2 (102 points)

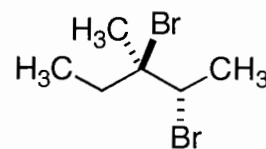
1. Draw the product(s) of the following reactions, paying careful attention to the stereochemical outcome, if any. (32 points)



2. Name the following molecules, including stereochemistry. (8 points)

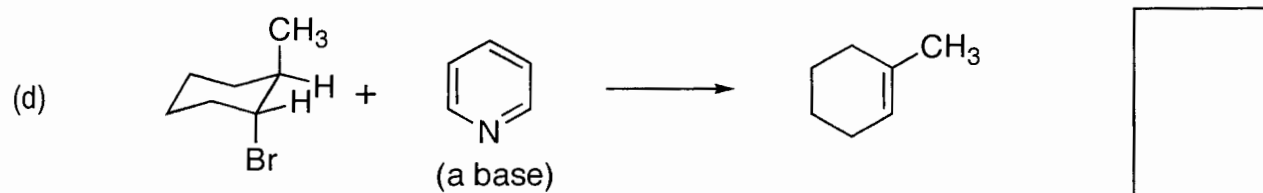
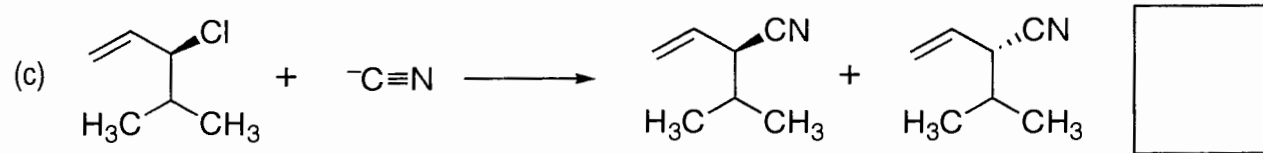
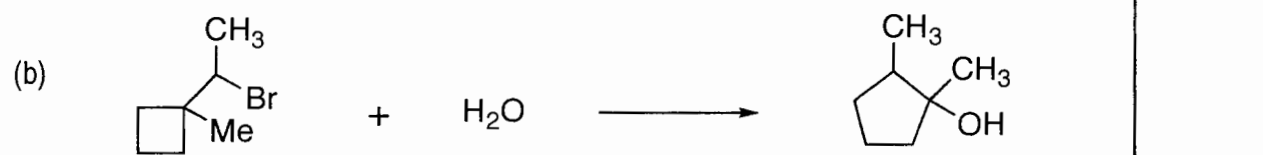
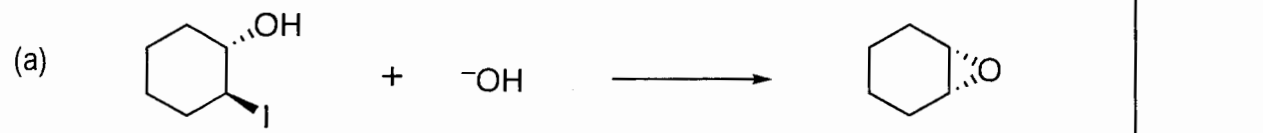


(a)

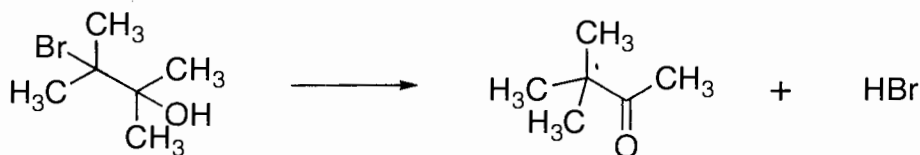


(b)

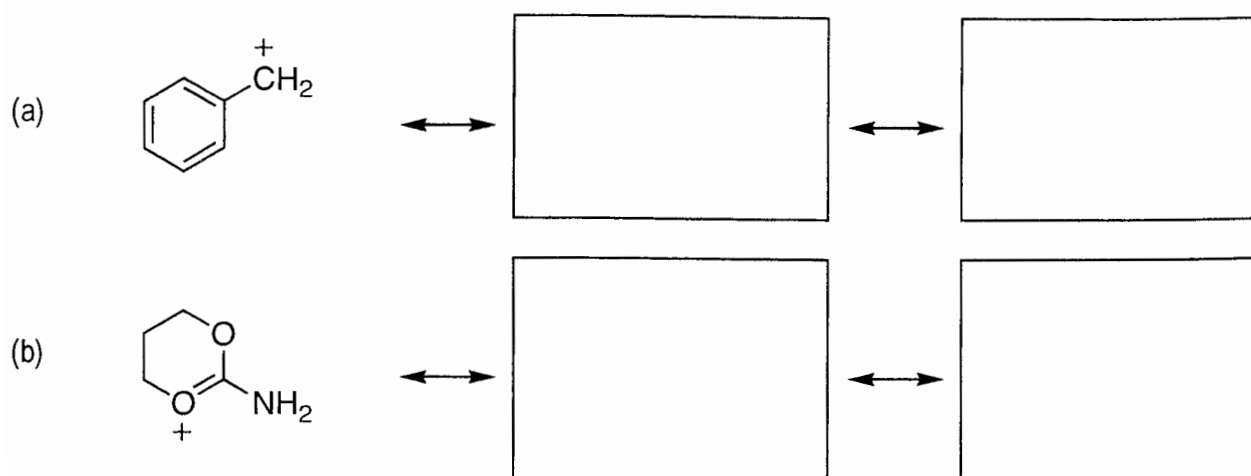
3. By which mechanism does each of the following reactions proceed (S_N2 , S_N1 , E2, or E1)? (12 points)



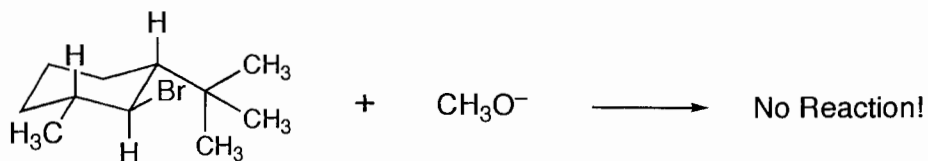
4. Give a step-by-step mechanism for the following reaction, showing the key intermediates. (8 points)



5. Draw two resonance structures for the each of the following compounds. (8 points)

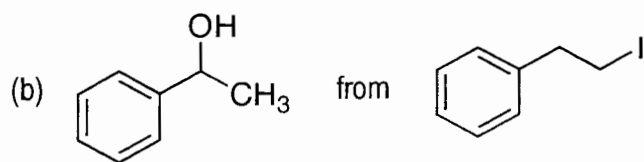


6. (a) Explain the following observation using chemical structures to illustrate your answer. (12 points)



(b) Draw a diastereomer of this cyclohexane that **will** give an E₂ elimination reaction (6 points).

7. Propose syntheses for the following compounds from the indicated starting materials. Each can be prepared in two steps. (16 points)



	Points	Possible Points
Page 1	_____	/ 32
Page 2	_____	/ 28
Page 3	_____	/ 26
Page 4	_____	/ 16
Total	<input type="text"/>	/ 102