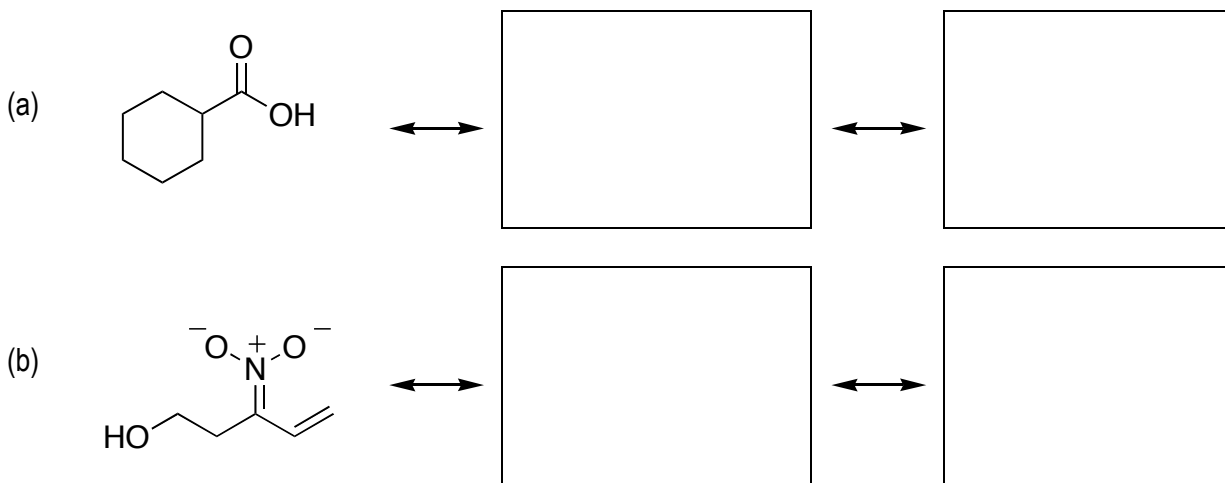
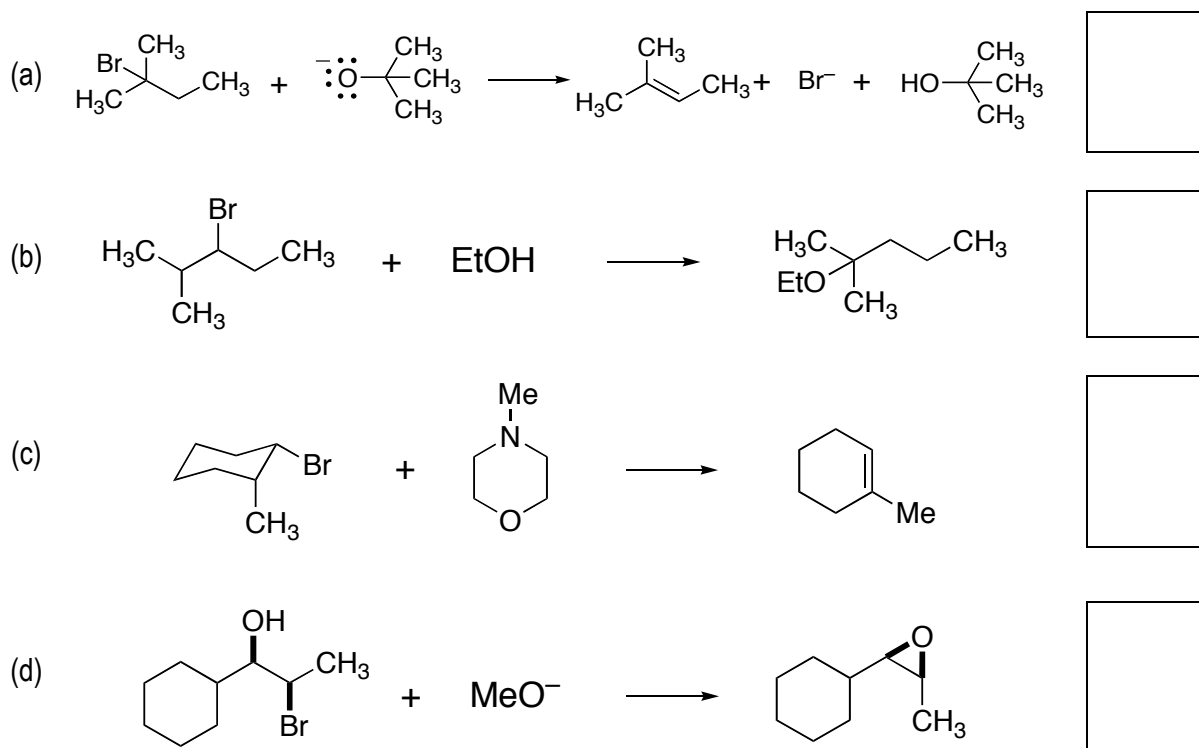


**Test 2** (104 points)

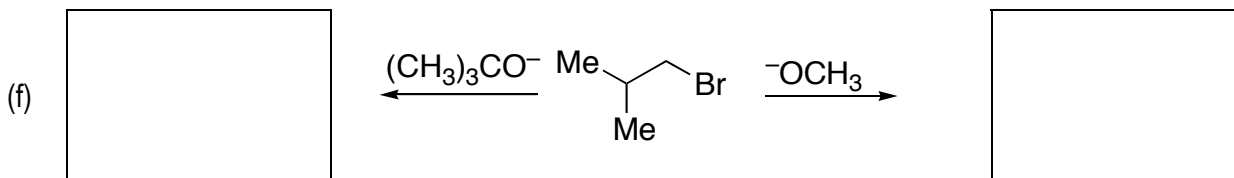
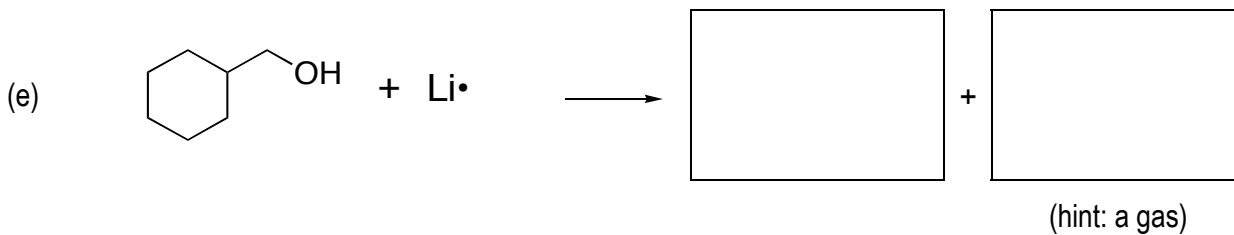
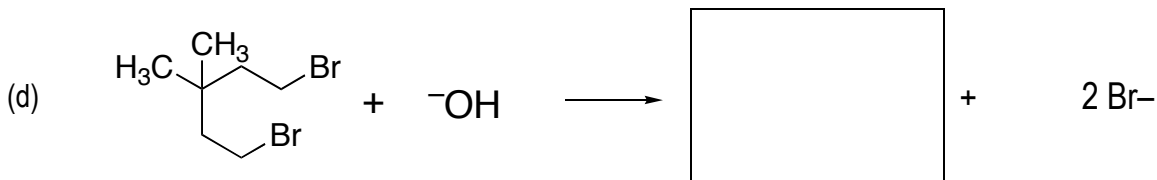
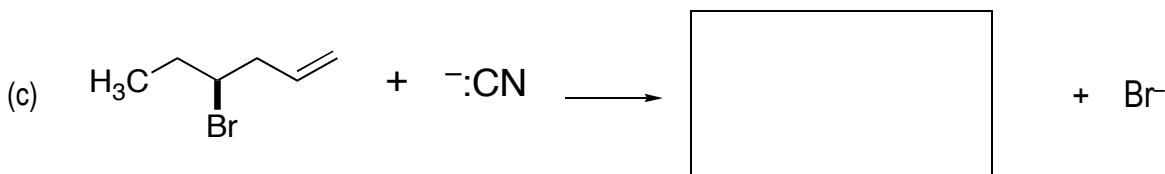
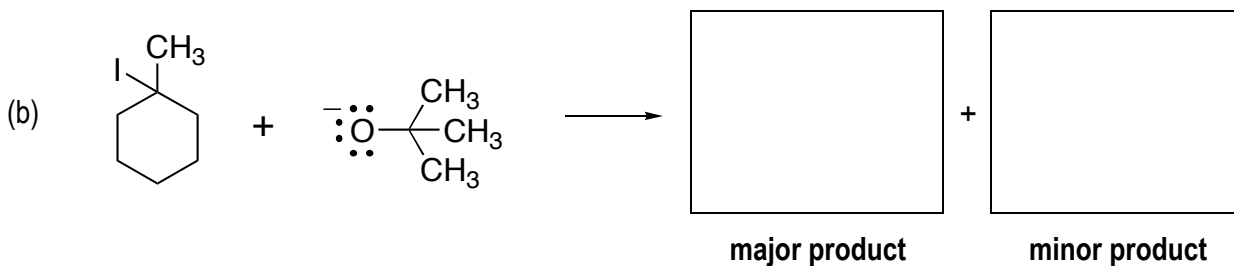
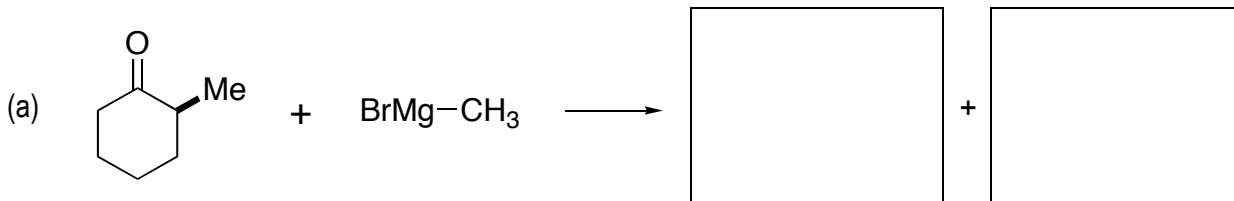
1. Draw two resonance structures for the each of the following compounds. (12 points)



2. By which mechanism does each of the following reactions proceed (E1, E2, S<sub>N</sub>1, S<sub>N</sub>2)? (12 points)



3. Draw the products of the following reactions. (30 points)

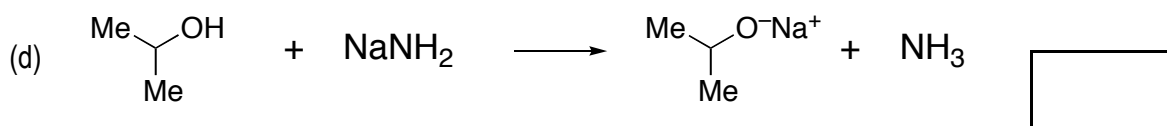
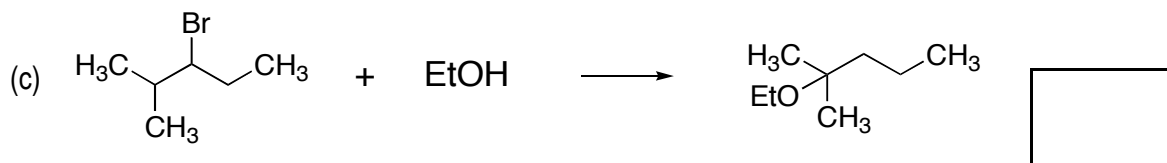
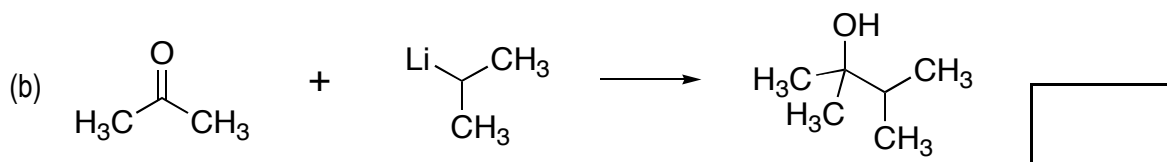
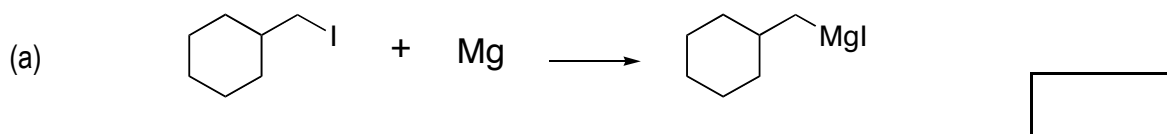


4. Which type of reaction is each of the following: (12 points)

**O-R:** oxidation–reduction

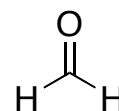
**N-E:** nucleophile–electrophile

**A-B:** acid–base



5. Draw a mechanism for the reaction shown in question 4c above. (6 points)

6. What is the hybridization of carbon in each of the following molecules? (9 points)



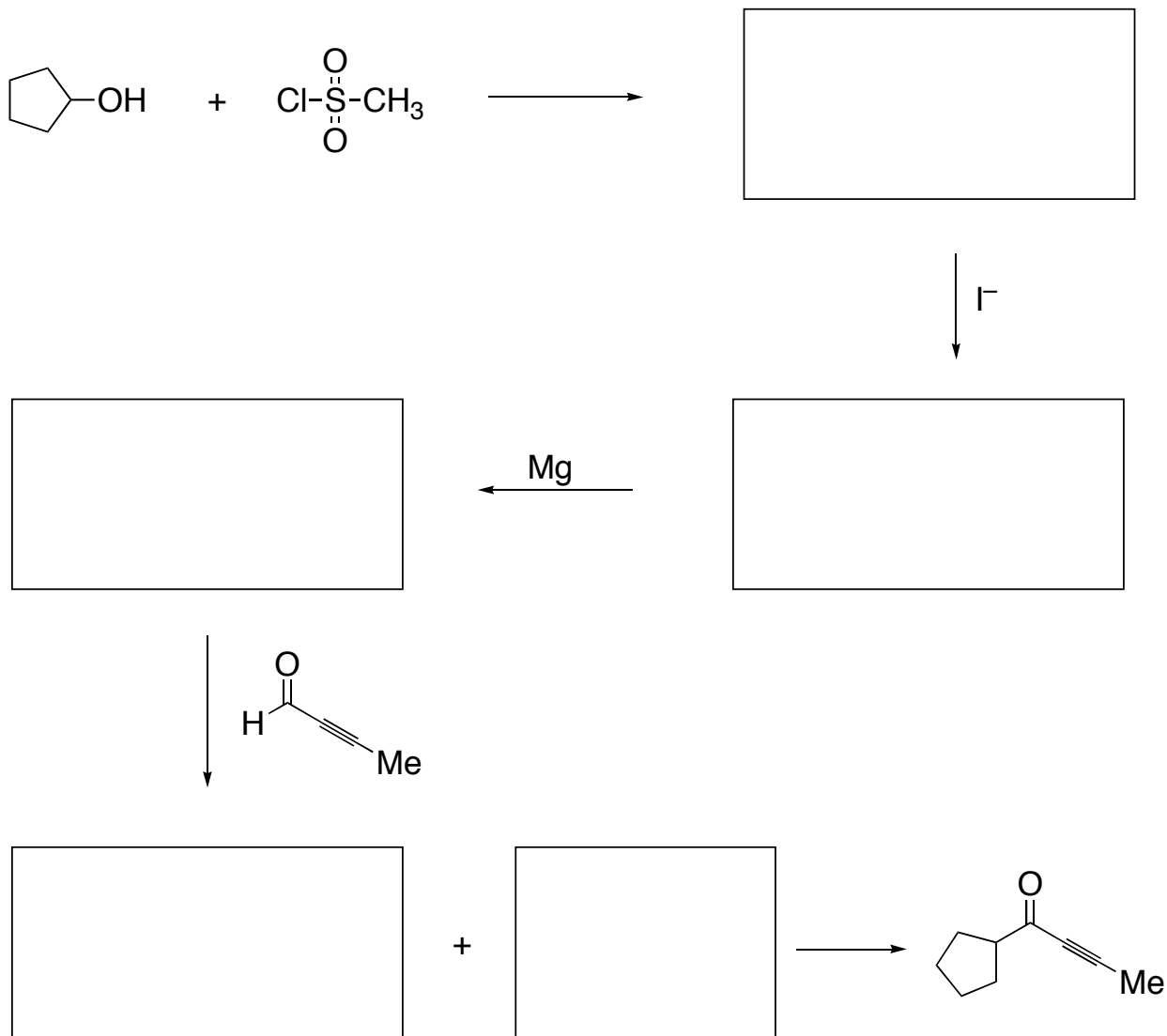
(a)

(b)

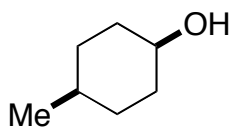
(c)

\_\_\_\_\_

6. Fill in the boxes with the correct product or reagent. (15 points)

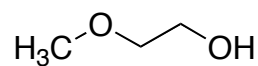


7. Give names for the following molecules, including stereochemistry. (8 points)



(a)

\_\_\_\_\_



(b)

\_\_\_\_\_

	<b>Points</b>	<b>Possible Points</b>
<b>Page 1</b>	_____	/ 24
<b>Page 2</b>	_____	/ 30
<b>Page 3</b>	_____	/ 27
<b>Page 4</b>	_____	/ 23
<b>Total</b>	<input type="text"/>	/ 104