

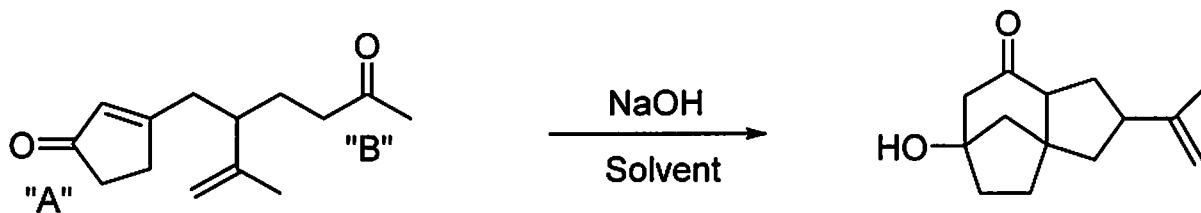
2018 ORG MECH: Nucleophiles and Bases

Quiz #3

20 pts

NAME: _____

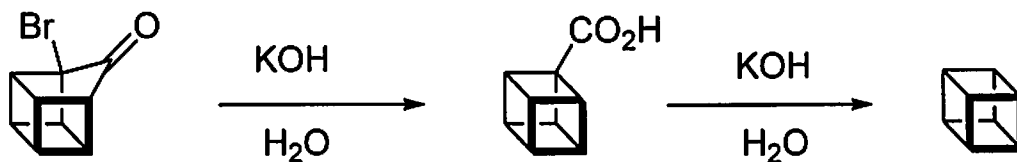
1) (1+6=7pts) For the transformation below:



a) Apart from it being in a ring, what is another significant structural difference between ketone A and ketone B?

b) Propose a mechanism for this reaction.

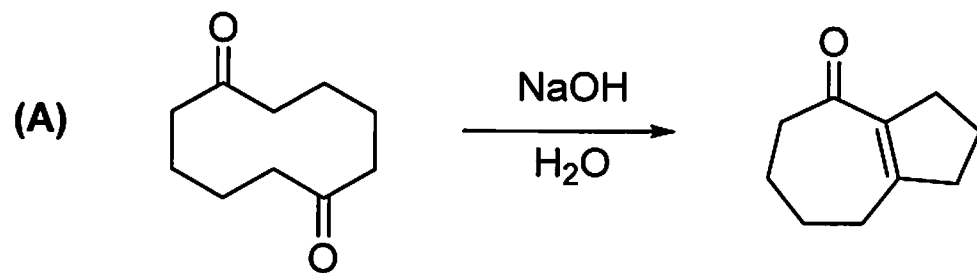
2) (1+7=8pts) For the (famous) reaction scheme below:



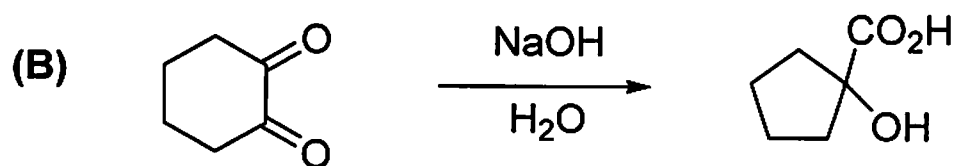
a) What named rearrangement is used in the first step?

b) Write the mechanism for both steps.

3) (5pts) Provide a mechanism for EITHER (A) *or* (B).



or



*****Bonus questions for up to 2 points*****

What is the (trivial) name of the 'cubic' product in Question (2)?

Which question involves a Michael Addition?

2018 ORG MECH: Nucleophiles and Bases

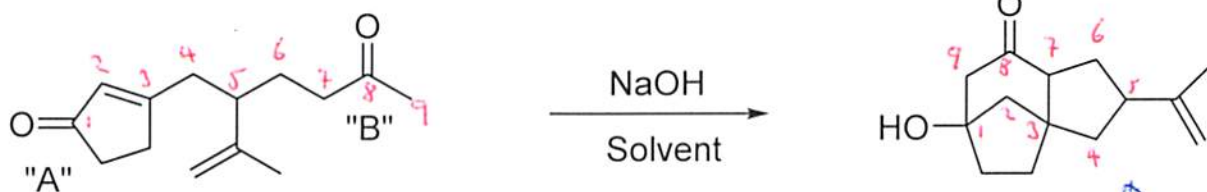
Quiz #3

20 pts

NAME:

ANSWERS

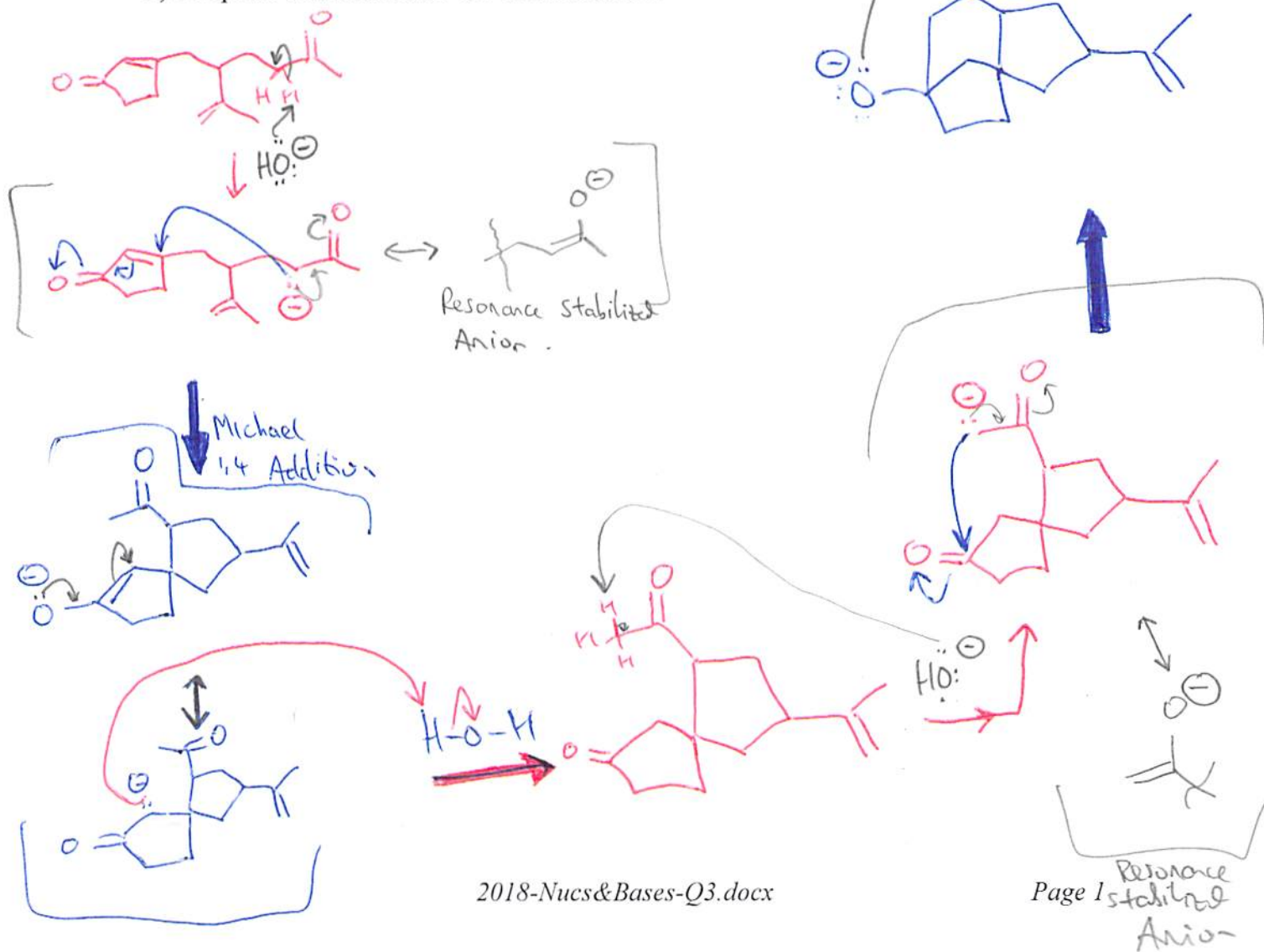
1) (1+6=7pts) For the transformation below:



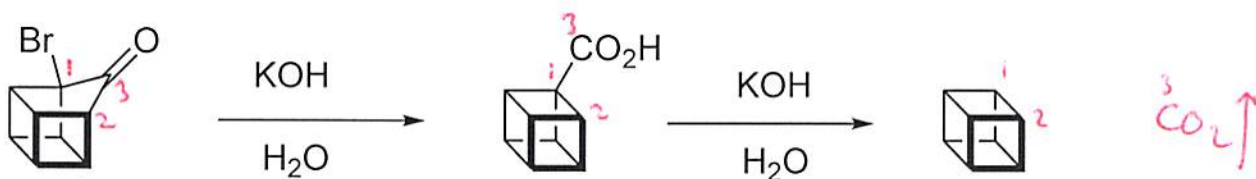
a) Apart from it being in a ring, what is another significant structural difference between ketone A and ketone B?

"A" is an α,β -unsaturated ketone.

b) Propose a mechanism for this reaction.



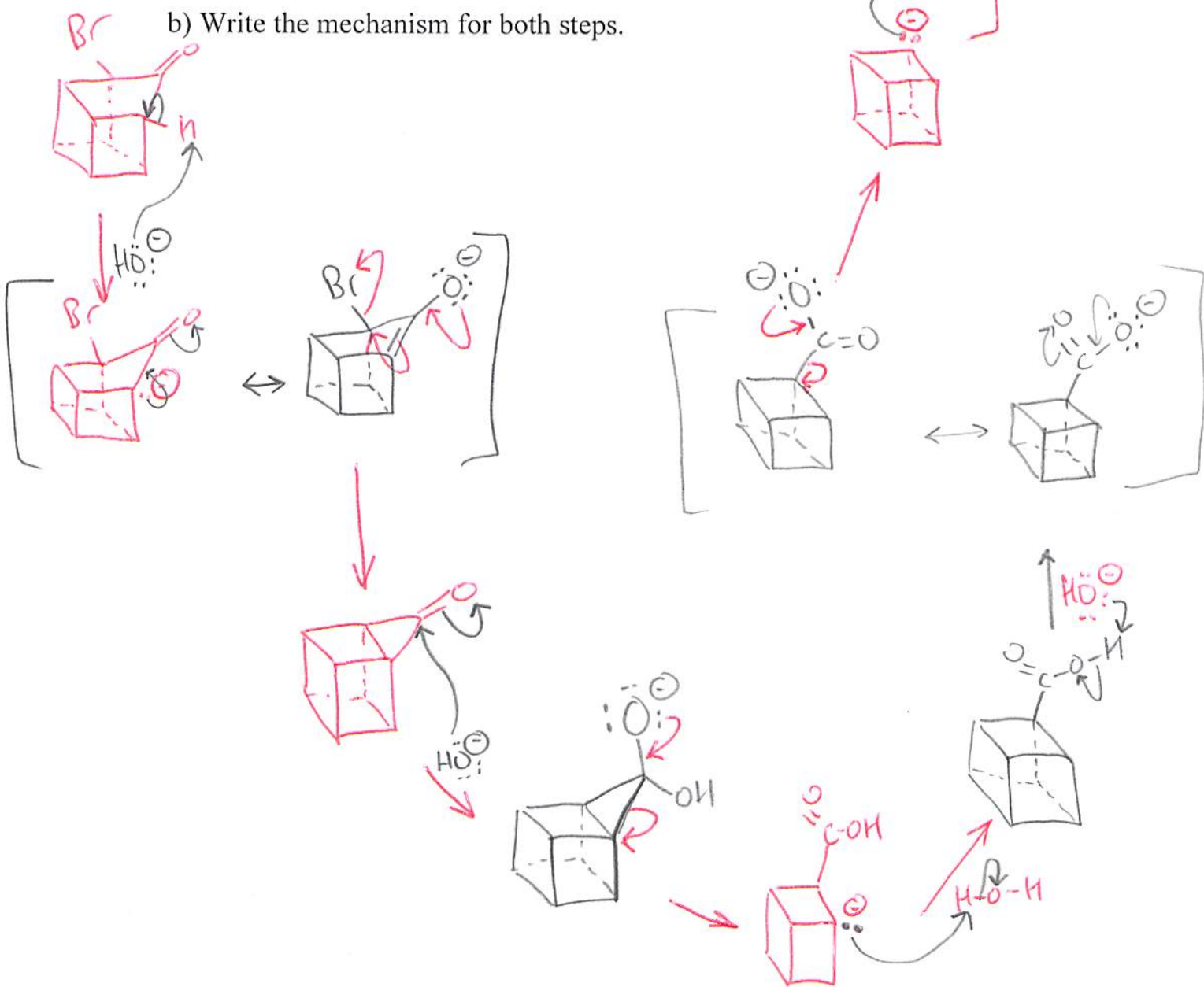
2) (1+7=8pts) For the (famous) reaction scheme below:



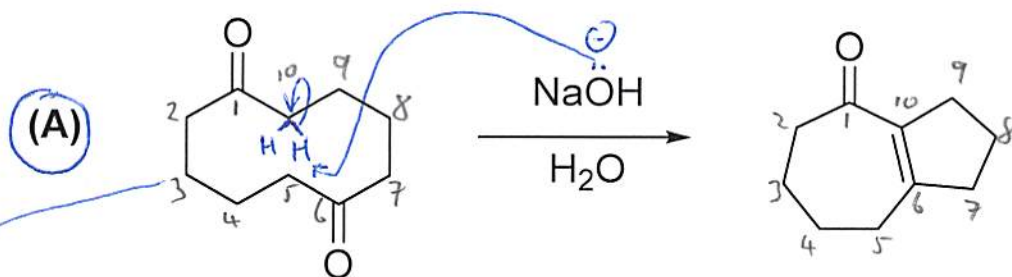
a) What named rearrangement is used in the first step?

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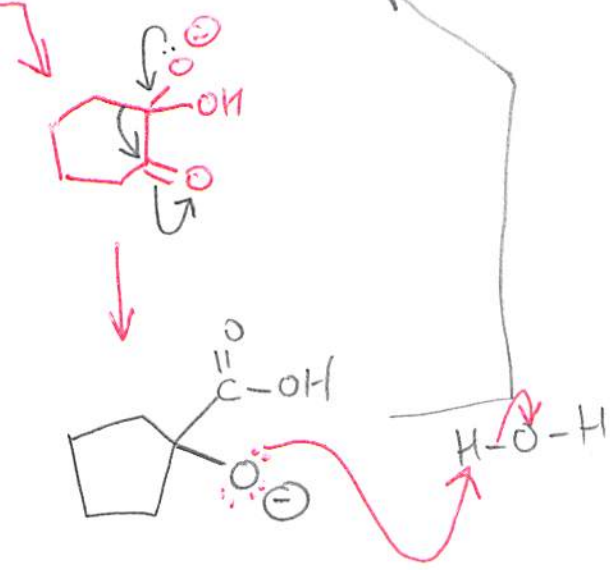
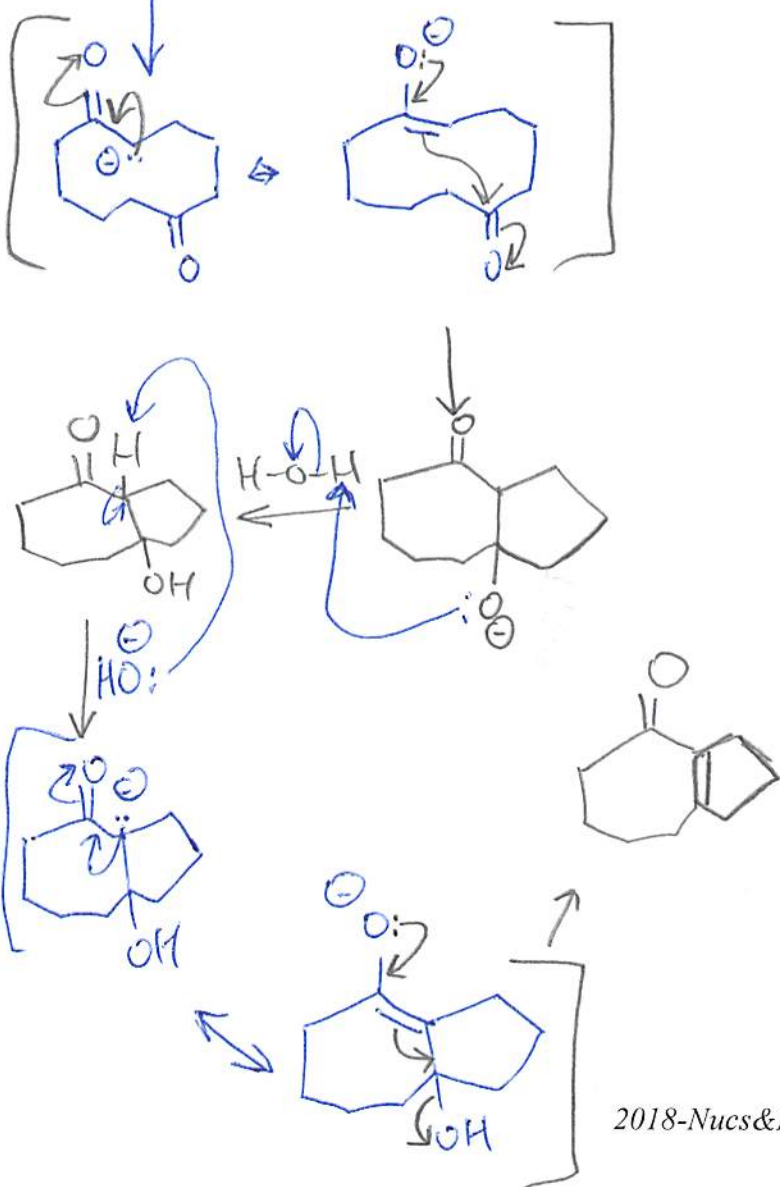
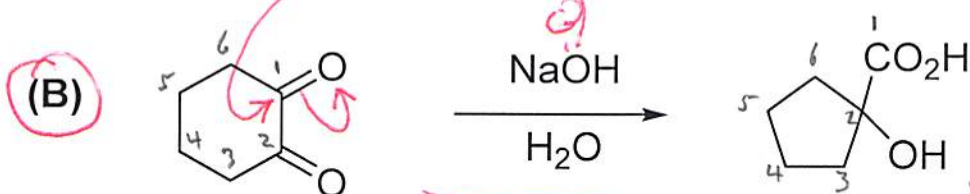
b) Write the mechanism for both steps.



3) (5pts) Provide a mechanism for EITHER (A) or (B).



or



*****Bonus questions for up to 2 points*****

What is the (trivial) name of the 'cubic' product in Question (2)?

CUBANÉ

Which question involves a Michael Addition?

Question 1.