Academic Honesty Policy. Academic honesty is strictly enforced on quizzes, exams, and other aspects of this course. Academic dishonesty will result in a failing grade in the class and a letter in the student's file. Activities constituting academic dishonesty include:

*Cheat*ing
- Copying from others during an examination.
- Communicating exam answers with other students during an examination.
- Offering another person's work as one's own.
- Taking an examination for another student or having someone take an examination for oneself.
- Tampering with an examination after it has been corrected, then returning it for more credit.
- Using unauthorized materials, prepared answers, written notes, or concealed information during an examination.

*Dishonest Conduct*
- Stealing or attempting to steal an examination or answer key from the instructor.
- Allowing another student to copy off of one's own work during a test.

*Collusion*
- Any student who knowingly or intentionally helps another student perform any of the above acts is subject to discipline for academic dishonesty.

I understand and will abide by this academic honesty policy: ____________________________ (signature) Seat: ______

1. Lithium aluminum hydride can react with more than one equivalent of an aldehyde or ketone, transferring more than one equivalent of hydride. You may think of this reaction as occurring by a mechanism in which the initially formed alkoxide anion and alane (AlH₃) react in a Lewis acid – Lewis base reaction and the resulting adduct then transfers another equivalent of hydride to another molecule of carbonyl compound. Using the template below, write curved-arrow mechanisms illustrating these reactions. Make sure to show each step of the reaction and all intermediates, products, charges, and lone pairs of electrons. (6 pts)

![Mechanism Diagram]

2. Design a synthesis of the following compound starting with compounds containing four carbon atoms or fewer as the only organic starting materials. You may use any other inorganic reagents you choose. (Smith 20.72c, 4 pts)

![Synthesis Diagram]