

# CH 328N Homework 12

**Due:** Monday 4/22/18 by 5PM...in the Box

**Read:** Read section 19.8, and 19.9 and pages 911-918 in section 20.5

**Do:** There are many practice problems and examples in the text. Please choose those that help you to understand the topics in the lecture and reading. Study for the test.

## Supplemental Problems:

1. Work the old copy of midterm exam 3 that is posted on our web site.
2. When the bromoketone **1** is treated with potassium t-butoxide in t-butanol the reaction produces exclusively the bicyclo[3.3.0] ketone **2**. When **1** is treated with a slight molar excess of lithium diisopropylamide in THF at  $-78^{\circ}\text{C}$ , the bicyclo[5.3.0] ketone **3** is formed almost exclusively. Use the curved arrow convention to show the mechanism of the formation of each of the products and briefly explain why the different reaction conditions favor formation of the different products.

