Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ June 2016

***All assignments are due on Monday, June 6. Late assignments will not be accepted.***

**Part A:** Draw each of the following structures in any form you choose. [12 pts]

1. 2, 3-dimethylnonane
2. 4-methyl-2-pentyne
3. 2,2,4-trimethyl-5-propyl- 3-octene
4. 3,5-dimethylcyclohexene
5. 2-methyl-1-pentene
6. cyclopropane
7. cis-3-hexene
8. 4-cyclobutyl-6-ethyl-2,5-dimethylnonane
9. 1, 3-diethylbenzene
10. 4-ethyl-5-phenyl-2-heptyne
11. 3,5-dimethylcyclodecene
12. 3,4,6-triethyl-5,7-dimethyl-1-nonyne

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**Part B:** Name each of the following compounds [8 pts]

**Part C** – Answer these questions on a separate piece of paper. Attach it to the assignment before submitting it.

1. **Draw** and **name all isomers** of the molecule with the formula C5H10. [9 pts]
2. Determine if each of the following names are correct. For incorrect names, provide the corrected name and a structural drawing of your choice. [6 pts]
   1. 2, 3–diethyl–4–propyloctane
   2. 5-ethyl-2,3-dimethylheptane

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* 1. 2, 3, 3–trimethylbutane