

CH328N Homework 1

Due: 1/25/16 by 5PM...in the “box” near WEL 2.212

Read: All of Chapter 14

Do problems: 14.1a,c; 14.6; 14.7; 14.9, 14.11: 14.28

Supplemental problems:

1. Write the structure of the “mystery compound” on the class web page..You need to “surf” the page to find it!
2. Estimate the M+1 peak intensity for cycloheptane
3. Garret has an unknown compound. He has worked diligently for hours and based on several complex analytical studies he has decided that he has either cycloheptane or cyclohexanone (C₆H₁₀O). He quickly runs a high resolution mass spectrum and finds M = 98.1096. What is the structure of his unknown??
4. What is the ratio of the intensities of the M to M+1 and M+2 peaks the mass spectrum of Br₂?