

Name: \_\_\_\_\_

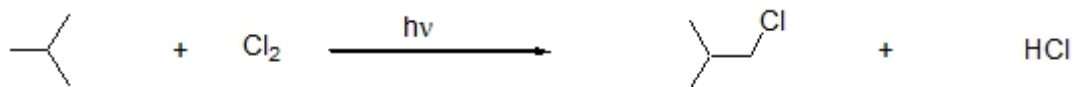
**Organic I Lecture**

**Fall 2011**

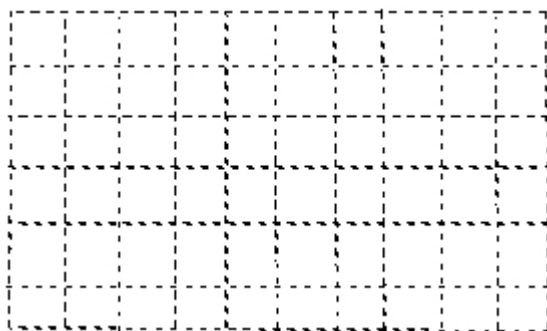
**Quiz #3**

(10 points)

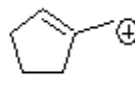
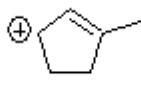
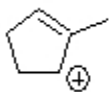
1. Using the provided table of bond-dissociation enthalpies, calculate the heat of reaction (in Kcals/mol) for the first propagation step in the reaction below. (3 points, problem 4-20)



2. Provide an energy diagram for an exothermic two-step reaction, where the first step is the rate determining step. Correctly label each axis. (4 points)



3. Which sequence ranks the following carbocations in order of increasing stability? (3 points)



- a) 1<2<3    b) 2<3<1    c) 3<1<2    d) 3<2<1    e) 2<1<3    f) 1<3<2