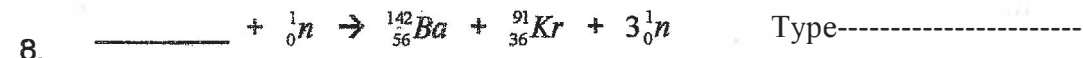


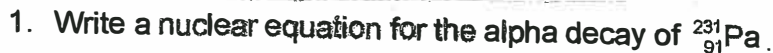
Complete the review using all of the skills presented in this packet!!

**Chapter 25 Review:**

**Part I: Balance each of the following equations. Then, identify those that are alpha decay, beta decay, fission, or fusion.**



**Part II: Write the following alpha and beta decay reactions.**



**Part III: Complete the following half life calculations. Show all work!**

1. The bismuth-210 isotope decays with a half life of 5.0 days. If an initial sample of 125 grams decays for 25 days, how much of the isotope will remain?

2. How long would it take for a sample of astatine-218 containing 750 atoms to decay down to 23.4375 atoms if the half life of the isotope is 2.0 seconds?