HONORS CHEMISTRY
HOMEWORK 13a. Name: _____

1. Write a balanced nuclear equation for each of the following:

a. Alpha decay of $_{92}^{238}U$

b. Beta decay of $_{83}^{214}Bi$

c. Alpha decay of $_{88}^{226}Ra$

d. Beta decay of $_{6}^{14}C$

2. The isotope $_{53}^{131}I$ has a half-life of 8 days. If 20 micrograms (μg) are injected into a patient, how much will remain in 24 days?

3. The isotope $_{15}^{32}P$ has a half-life of 14.3 days. If a small amount is injected into a patient, how long will it be before the amount remaining is less than 1/250 of the amount injected?