START	Iodine−131 has a half−life of 8 days. What percent of the sample is present at 0 days?	12.5	Iodine−131 has a half−life of 8 days. What fraction of the sample remains after 24 days?
100	Iodine−131 has a half−life of 8 days. What percent of the sample remains after 8 days?	1/8	Radium−226 has a half−life of 1600 years. What mass (in g) of an 80 g sample remains after 3200 years?
50	Iodine−131 has a half−life of 8 days. What fraction of the sample remains after 8 days?	20	56 g of cobalt−60 ($t_{1/2} = 5.26$years) decays for ~21 years. What mass in grams remains?
1/2	Iodine−131 has a half−life of 8 days. What percent of the sample remains after 16 days?	3.5	A 16 g sample of Zn−71 decays to 2.0 g in 7.2 minutes. What is its half−life in minutes?
25	Iodine−131 has a half−life of 8 days. What fraction of the sample remains after 16 days?	2.4	How many days will it take for 30 g of Pd−100 ($t_{1/2} = 3.6$ days) to decay to 0.94 g?
1/4	Iodine−131 has a half−life of 8 days. What percent of the sample remains after 24 days?	18	How many half−lives will pass for Os−182 to go from 141 g to 1.1 g?

7	Tritium (H − 3)has a $t_{1/2}$ of 12.26 years. What was the original mass (in g) of the sample if 3.5 g remained after 49 years?	370	I − 123 is given to a patient for a thyroid scan. Dosing is 0.076 mCi per 10 kg body weight. What dose (in mCi) is given to a 26 kg patient?
56	^{60}Co ($t_{1/2} = 5.26$ years) had an initial activity of 192 mCi. What is its activity in mCi after 21 years?	0.20	STOP
12	^{137}Cs was released in Chernobyl accident in 1986 and the activity was 6 MCi. What is the half − life (in years) if the 2016 value was an activity of 3 MCi?		
30	A patient needs 5.5 mCi of ^{131}I. The solution contains 1.5 mCi/mL. What volume (in mL) should be given to the patient?		
3.7	A 68 kg patient is given ^{90}Y for treatment of cancer. Dose is 0.75 mCi/kg. Vial contains 16 mCi/mL. What volume (in mL) should be given?		
3.2	1.0 g of U − 235 releases 3.4×10^8kcal of energy, the same amount as burning 1 ton (2000 lbs) of coal. How much energy (in kcal) is released by 1.0 g of coal?		