

Practice on $t_{1/2}$

$^{226}_{88}\text{Ra}$, a common isotope of radium, has a half-life of 1620 years. Knowing this, what is the fraction of a sample of this isotope remaining after 100 years?

The half-life of Pa-234 is 6.75 hr. How much (what fraction) of a sample of this isotope remains after 20.25 hr?

The half-life of Th-227 is 18.2 day. How many days are required for 0.70 of a given sample to decay?

The half-life of Rn-222 is 3.823 day. What was the original mass of a sample of this isotope if 0.0500 g remains after 7.646 day?