

1. The half-life of Zn-71 is 2.4 minutes. If one sample had 100.0 g at the beginning, how many grams would be left after 7.2 minutes has elapsed?
2. Os-182 has a half-life of 21.5 hours. How many grams of a 10.0 gram sample would be left after exactly three half-lives?
3. 100.0 grams of an isotope with a half-life of 36.0 hours is present at time zero. How much time will have elapsed when only 6.25 grams remain?
4. The half-life of radon-222 is 3.8 days. How much of a 100 gram sample is left after 15.2 days?
5. Carbon-14 has a half-life of 5,730 years. If a sample contained 70 mg originally, how much is left after 17,190 years?
6. If 5000 grams of Au-198 decays to 156.25 grams in 20 days, what is the half-life of Au-198?