

Chapter 9 Section 6

Example: page 734 – Example 2

Use the fact that after 5715 years a given amount of carbon-14 will have decayed to half the original amount to find the exponential decay model for carbon-14

In 1947, earthenware jars, containing what are known as the Dead Sea Scrolls were found by an Arab Bedouin herdsman. Analysis indicated that the scrolls wrappings contained 76% of their original carbon-14. Estimate the age of the Dead Sea Scrolls

Use the decay model: $A = A_0 e^{-0.000121t}$