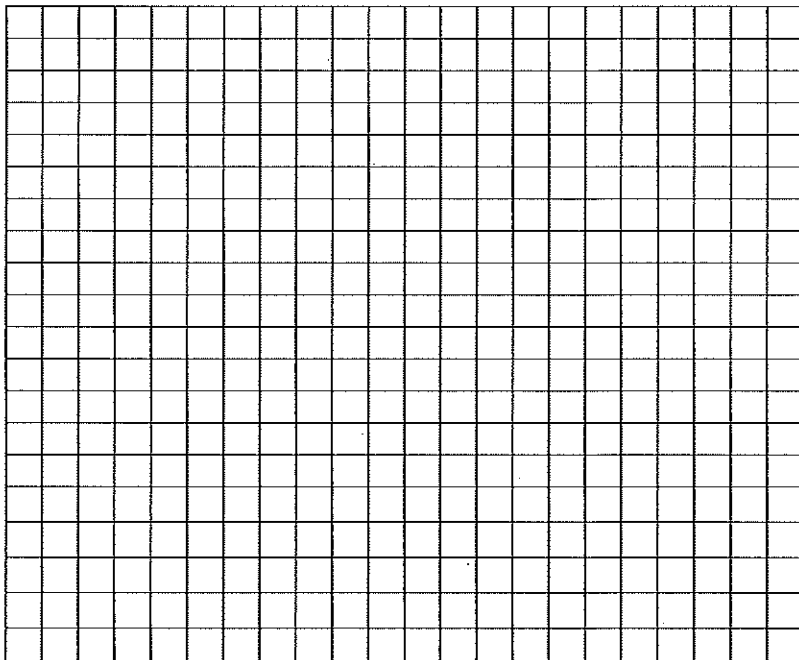


Understanding Half-Life

It is February 15th, 2010. You receive a sample of Krypton-85 which weighs 550 grams. The half-life of Krypton-85 is 11 years. Radioactive isotopes such as Krypton-85 are generally radioactive for 20 half-lives.

A) Determine the amount of Krypton-85 you will have in five half-lives. B) Graph the amount of parent material for five half-lives. C) What fraction of Krypton-85 remains after 5 half-lives? D) When will the sample you have no longer be radioactive? E) After 5 half-lives, what percent has radiated as daughter material? A grid has been provided below to assist you in graphing.



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