

Classwork 12

College Algebra and Trigonometry, MTH 123, Section 3260, Fall 2011

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Name: _____

1. After 3 days a sample of radon-222 has decayed to 58% of its original amount.

(a) What is the rate of decay ?

(b) What is the half-life of radon-222 ?

(c) How long will it take the sample to decay to 20 % of its original amount ?

Exponential decay: $n(t) = n_0 e^{-rt}$ where r is the rate of decay.