

CALCULUS 2 - FALL 2017 - HOMEWORK 5

1,2) What is the half-life of a radioactive substance that decays to a third of its original mass in 200 years?

3,4) Two people start a rumor at 9:00 am in a room of thirty people that are free to mingle but not leave. After ten minutes, eight people have heard the rumor. When will twenty people have heard it?

5,6) Hurricane warnings are broadcast continually over public radio starting at 9:00 am. By 10:00 am 30% of the population have heard the warning. When will 50% have heard?