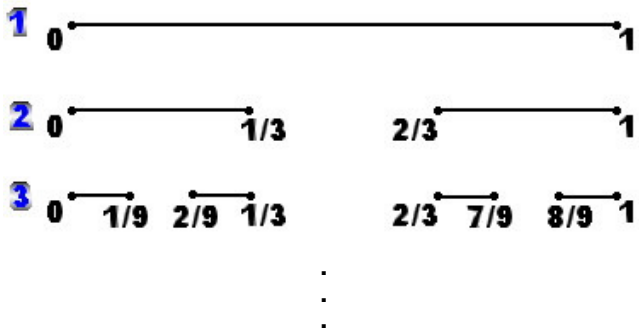
# Supplement to Chapter 4 of Sutherland,

## *Introduction to Metric and Topological Spaces* (Second Edition)

*The Cantor set.* Exercise 6.5 (on page 73) introduces an important example of a closed subset of the unit interval called the ***Cantor set.*** Here is a drawing which shows the first few steps in the construction of this set, which proceeds by successive removal of the middle thirds of the intervals remaining after the preceding step:




(***Source:*** http://library.thinkquest.org/2647/chaos/cantor.htm)

The ***YouTube*** video http://www.youtube.com/watch?v=Ni4NXSy17iI contains an animation of this process, and the ***Wikipedia*** article http://en.wikipedia.org/wiki/Cantor_set is one reference for further information about the Cantor set.