## **Let** C denote the Cantor Set

- 1. Show that C contains at least one element
- 2. Show that C contains at least a countable number of elements Hint: What is the right endpoint of the leftmost subinterval in  $C_n$ ?
- 3. What is the total width of the intervals removed from  $C_{n-1}$  to form  $C_n$ ?
- 4. What is the total width of the intervals removed to form C?