LECTURE 01 : 08|29|2017

* Set Theory (1870's) :-

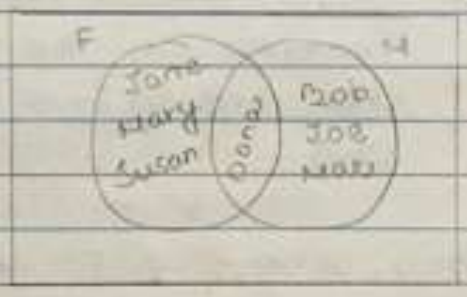
Set are the fundamental unit of all of Mathematics.

A set is a collection of elements which are unordered and unique.

Ex: F := {Jane, Mary, Susan, Dana}

F denotes the set on the left; := assigned or defined as; { begin; elements; } end

M := {Bob, Joe, Max, Dana}



** Sets can have infinite elements

Ex: $\mathbb{N} := \{1, 2, 3, \ldots\}$ ... continuation of the pattern

$\mathbb{N}$: Natural numbers

$\mathbb{Z} := \{\ldots, -2, -1, 0, 1, 2, \ldots\}$