9/13 Sets/Set Notation

Thursday, September 13, 2012
10:14 AM

{ } "curly brackets"

finite: it ends {1,2,3} elements = 3

elements: how many #'s in set

infinite: has no end, continuous {1,2,3,...}

elements = ∞

empty set (null): has no elements

{ } ∅

intersection "AND" what they have in common. (share)

symbol: ∩

ex: A{1,2,3,4} B{1,4,7,10}

find A∩B. {1,4}

A{1,2} B{3,4}

find A∩B. { } or ∅

union: "OR" want one of everything (all)

symbol: ∪

ex: A{1,2,3,4} B{3,4,5}

find A∪B. {1,2,3,4,5}

universal set: the main set "big"

subset: piece/part of the universe.

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$U = \{0,1,2,3,4,5\}$ "tail" universe

$A = \{1,3,5\}$ subset

$B = \{0,2,4\}$

Complement: (not) what doesn't belong in a subset fr. the universe

Ex: use U, A, B from above.

$\bar{A}, A', A^c, \sim A \Rightarrow A\{1,3,5\}$ $\bar{A}\{0,2,4\}$ ↑ not in A

Complement

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