

常用离散数学名词中英文对照

集合: set
元素: element
严格定义:well defined
成员:member
外延原理:principle of extension
泛集(全集):universal set
空集:empty set(null set)
子集:subset
文氏图:venn diagram
并:union
交:intersection
相对补集:relative complement
绝对补集:absolute complement
补集:complement
对偶性:duality
幂等律:idempotent laws
组合律:associative laws
交换律:commutative laws
分配律:distributive laws
同一律:identity laws
对合律:involution laws
求补律:complement laws
对偶原理:principle of duality
有限集:finite set
计算原理:counting principle
类:class
幂集:power set
子类:subclass
子集合:subcollection
命题:proposition
命题计算:proposition calculus
语句:statement
复合:compound
子语句:substatement
合取:conjunction
析取:disjunction
否定:negation
真值表:truth table
重言式:tautology

矛盾:contradiction
逻辑等价:logical equivalence
命题代数:algebra of propositions
逻辑蕴涵:logicalimplication

关系:relation
有序对:ordered pair
划分:parti-on
偏序:partial order
整除性:divisibility
常规序:usual order
上确界:supremum
下确界:infimum
上(下)界:upper(lower) bound
乘积集:product set
笛卡儿积:cartesian product
笛卡儿平面:cartesian plane
二元关系:binary relation
定义域:domain
值域:range
相等:equality
恒等关系:identity relation
全关系:universal relation
空关系:empty relation
图解:graph
坐标图:coordinate diagram
关系矩阵:matrix of the relation
连矢图:arrow diagram
有向图:directed graph
逆关系:inverse relation
转置:transpose
复合:composition
自反:reflexive
对称的:symmetric
反对称的:anti-symmetric
可递的:transitive
等价关系:equivalence relation
半序关系:partial ordering relation
函数:function
映射:mapping
变换:transformation
像点:image

象:image
自变量:independent variable
因变量:dependent variable
函数图象:graph of a function
合成函数:composition function
可逆函数:invertible function
一一对应:one to one correspondence
内射:injective
满射:surjective
双射:bijjective
基数度:cardinality
基数:cardinal number

图论:graph theory
多重图:multigraphy
顶点:vertex(point,node)
无序对:unordered pair
边:edge
相邻的 adjacent
端点:endpoint
多重边:multiple edge
环:loop
子图:subgraph
生成子图:generated subgraph
平凡图:trivial graph
入射:incident
孤立点:isolated vertex
连通性:connectivity
通路:walk
长度:length
简单通路:chain(trail)
圈:path
回路:cycle
连通的:connected
连通分支:connected component
距离:distance
欧拉图:eulerian graph
欧拉链路:eulerian trail
哈密顿图:hamilton graph
哈密顿回路:hamilton cycle
货郎行程问题:traveling salesman
完全图:complete graph

正则图:regular graph
偶图:bipartive graph
树图:tree graph
加权图:labeled graph
同构图:isomorphic graph
同构:isomorphism
同胚的:homeomorphic
平面图:planar graph
着色问题:colortion
区域:region
地图:map
非平面图:nonplanargraph
着色图:colored graphs
顶点着色:vertex coloring
色散:chromatic number
四色原理:four color theorem
对偶地图:dual map
退化树:degenerate tree
生成树:spanning tree
有根树:rooted tree
根:root
水平(深度):level(depth)
叶子:leaf
分支:branch
有序有根树:ordered rooted tree
二元运算符:binary operational symbol

半群:semigroup
单位元素:identity element
右(左)单位元素:right(left) identity
左(右)消去律:left(right) cancellation law
逆:inverse
并列:juxtaposition
有限群:finite group
正规子群:normal subgroup
非平凡子群:nontrivial subgroup
循环群:cyclic group
环:ring
整环:integral domain
域:field
交换环:commutative ring
加性环:additive group

汇合:meet

格:lattice

有界格:bounded lattice

分配格:distributive lattice

补格:complemented lattice

表示定理:representation theorem