

Glossary

High School Level

Integrated Algebra Glossary

English | Simplified Chinese

Translation of Integrated Algebra terms based on the Coursework for
Integrated Algebra Grades 9 to 12.



This glossary is to PROVIDE PERMITTED TESTING ACCOMMODATIONS of ELL/MLL students. It should also be used for INSTRUCTION during the school year. The glossary may be downloaded, printed and disseminated to educators, parents and ELLs/MLLs.

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Integrated Algebra

English	Simplified Chinese
Problem Solving	解题
algebraically	用代数方法、在代数上
concept	概念
conjecture	推测
constraint	约束、限制
equivalent	等值的
formulate	使公式化、规划、构想出
generalization	概括化、普遍化
graphically	图像的
multiple representations	多重表述
numerically	数值的
parameter	参数
pattern	模式、型式、图
relative efficiency	相对效率
strategy	策略
verbally	言辞的、文字上的
Reasoning and Proof	推论与证明
appropriate	适当的
approximation	近似
argument	论证
claim	要求、声称、主张
conclusion	结论
conjecture	推测
counterexample	反例、反证
explain	解释
inductive reasoning	归纳推理
logical argument	逻辑论证
mathematical conjecture	数学推测
proof	证明
refute	驳斥、辩驳
systematic approach	系统方法
validity	有效性

Integrated Algebra

English	Simplified Chinese
Venn diagram	范氏圆形对比图
verify	检验、核验
Communication	通信、联络、传送
accuracy	准确性
analyze	分析、解析
argument	论证
coherent	一致的、协调的
communicate	传达、传递、通讯、交流
comprehension	理解
conclusion	结论
conjecture	推测
decoding	译码、解码
elicit	引出、推导出
equation	方程式
evaluate	求...值、估计
extend	延伸、延展
formula	公式、方程式
function	函数
graph	图、作图
interpretation	解释、阐明
mathematical visual	直观数学
rationale	逻辑依据、原理的阐述
standard (mathematical) notation	标准（数学）符号
strategy	策略
table	表、表格
technical writing	技术写作
terminology	术语、专门名词
valid	有效
Connections	连接
coherent whole	整体一致、整体协调
concept	概念
connection	连接

Integrated Algebra

English	Simplified Chinese
formulate	使公式化、规划、构想出
physical model	实体模型
procedure	过程、程序
quantitative model	量模型
representation	表述
Representation	表述
angle of elevation	仰角
array	排列、列阵
chart	表、图表
compare	比较
diagram	图、图表
equation	方程式
function	函数
graph	图、作图
interpret	解释、阐明
mathematical phenomena	数学现象
organize	组织、安排
physical phenomena	物理现象
profit	利润
record	档案、记录
social phenomena	社会现象
symbol	符号
table	表、表格
technology	技术
translate	转化
Number Sense and Operations	数字概念与运算
absolute value	绝对值
algebraic problem	代数问题
arithmetic operation	算术运算
arrangements (permutations)	排列
associative property	结合性
closure property	封闭性

Integrated Algebra

English	Simplified Chinese
commutative property	互换性
counting techniques	计算技巧
decimal	小数
denominator	分母
discount	折扣
distributive property	分配法
exponential expression	指数表达式
expression	表达式
factorial	阶乘
field	域
fraction	分数
Fundamental Principle of Counting	计算的基本原则
group	群
identity property	恒等性
inverse property	逆反性
like/unlike radical terms	与根式项相似/不相似
number theory	数字定理
numerator	分子
percent of increase/decrease	百分率增长/下降
product	乘积
properties of the Real numbers	实数的性质
proportionality/direct variation	比例/直接变量
quotient	商
radical	根式
radicand	被开方数
real numbers	实数
scientific notation	科学记数法
simplest form	最简式
variable	变量
Algebra	代数
acute angle	锐角
adjacent side/angle	邻边/邻角
algebraic equation	代数方程式

Integrated Algebra

English	Simplified Chinese
algebraic expression	代数表达式
algebraic fraction	代数分数式
analyze	分析、解析
axis of symmetry	对称轴
binomial	二项式
coefficient	系数
common base	共底、同底
complement of a subset	子集之补集
coordinates	坐标
cosine	余弦
dependent	相关
difference of two perfect squares	两个完全平方的差别
element	元、元素
equation	方程式
exponent	指数
exponential growth and decay	指数增长和减少
expression	表达式
factoring	因式分解
fractional expression	分数表达式
greatest common factor (GCF)	最大公因式 (数)
hypotenuse	斜边
independent variable	自变量、独立变量
inequality	不等式
integer	整数
integral coefficient	整数系数
integral exponent	整数指数
integral root(s)	整数根
intersection of sets	集合的相交
interval notation	间隔符号
lead coefficient	首项系数
legs of a right triangle	直角三角形的直角边
line parallel to the x- or y-axis	与x-轴或者y-轴平行的线
linear equation in one variable	一个变量的一次方程、一个变量的线性方程

Integrated Algebra

English	Simplified Chinese
linear inequality in one variable	一个变量的一次不等式、一个变量的线性方程
literal equation	文字方程
lowest terms fraction	分数的最简式
monomial	单项式
multiplication property of zero	零的乘法性质
opposite side/angle	对边/对角
parabola	抛物线
parallel	平行
polynomial	多项式
product	乘积
properties of exponents	指数的性质
proportion	比例
Pythagorean Theorem	勾股定理、勾股定理
quadratic equation	二次方程
quantitative	量的、数量的
quotient	商
ratio	比、比率
relation	关系
right angle	直角
right triangle	直角三角形
root(s) of an equation	方程式的根
roster form	人员名簿
set	集
set-builder notation	集标记符号
sine	正弦
slope	斜率、坡度
solution set	解集
subset	子集
sum	和
system of linear inequalities	一次不等式系统
systems of linear equations	一次方程式系统
tangent	切线
translate (from verbal to symbolic)	转化（从文字至符号）

Integrated Algebra

English	Simplified Chinese
trigonometry	三角学
trinomial	三项式
undefined	不定项
union of sets	集的合集
universal set	全集
variable	变量
verbal expression	文字表达式
verbal sentence	文字语句
vertex	顶点 (单数)
x-axis	x-轴
y-axis	y-轴
Geometry	几何
absolute value function	绝对值函数
angle	角
area	面积
axis of symmetry of a parabola	抛物线的对称轴
circle	圆
coefficient	系数
cylinder	圆柱体
decagon	十边形
exponential function	指数函数
function	函数
generalize	概括化、普遍化
geometric shape	几何图形
graph of a relation	关系图
hexagon	六边形
investigate	调查
nonagon	九边形
octagon	八边形
ordered pair	坐标点序对
parabolic function	抛物线函数
parallelogram	平行四边形
pentagon	五边形

Integrated Algebra

English	Simplified Chinese
perimeter	周长
polygon	多边形
quadrilateral	四边形
quarter-circle	四分之一圆
rational coefficient	有理系数
rectangle	长方形
rectangular solid	长方形立体
regular polygon	正多边形
relation	关系
rhombus	菱形
roots of a parabolic function	抛物线函数的根
sector of a circle	(圆内) 扇形
semi-circle	半圆
spatial reasoning	空间论证
square	正方形
surface area	表面面积
trapezoid	梯形
triangle	三角形
vertex	顶点 (单数)
visualization	可见性、形象化
volume	体积、容积
Measurement	测量
appropriate unit	适当单位
conversion	转换
cubic unit	立方单位
error	错误
linear measure	线性测量
linear unit	线性单位
magnitude	量、数量、长度
measurement system	测量系统
rate	比、速率
relative error	相对误差
square unit	平方单位

Integrated Algebra

English	Simplified Chinese
unit	单位
Statistics and Probability	统计量与概率
appropriateness	正确性
biased	有偏差的
bivariate	二元的、二变量的
box-and-whisker plot	百分位数图
calculated probability	计算概率
categorize	分类
causation	因果关系、引起、导致
central tendency	集中趋势
complement	余角
conditional probability	条件概率
correlation	关联、相互关系
cumulative frequency distribution table	累计频率分布表
cumulative frequency histogram	累计频率柱形图
data	数据
dependent events	相依事件
dependent variable	相依变量
element	元、元素
empirical probability	经验机率、经验概率
experimental design	实验设计
extrapolation	外推法、归纳、推论
favorable event	有利事件
finite sample space	有限样本空间
five statistical summary	五个统计总结
frequency distribution table	频率分布表
histogram	柱形图
independent events	独立事件
independent variable	独立变量、自变量
interpolation	内插法、内推法
line of best fit	最佳拟合线
linear transformation	线性变换、一次变换
maximum	最大值

Integrated Algebra

English	Simplified Chinese
mean	平均数
measure of central tendency	集中趋势测量
median	中位数、中线
minimum	最小值
mode	众数
mutually exclusive events	互斥事件
not mutually exclusive events	非互斥事件
percentile rank	百分位数等级
probability	概率
qualitative	质的、质量的
quantitative	量的、定量的
quartiles (specifically: first, second, third or lower, middle, upper)	四分点 (的)、四分值 (的)、四分位数 (的) (特别是: 第一、第二及第三个四分位, 也称为低、中及高四分位数)
range	区域、范围、量程、排列
sample space	样本空间
scatter plot	(在直角坐标系上) 定点
series	级数
univariate	单变量的、一元的

NYS Grades 9 – 12 Math Terms Addenda

Common Core Math Standard	ENGLISH	CHINESE
F-IF.C.8	absolute-value function	绝对值函数
S-REI.A.2	algebraic manipulation	代数运算
S-ID.B.5	categorical data	分类数据
N.C.N.4	complex plane	复平面
S-ID.B.5	conditional relative frequency	有条件的相对频率
N.C.N.5	conjugation of complex numbers	共轭复数
F-LE.A.1	constant percent rate	恒等百分率
S-ID.C.9	correlation and causation	相关性和因果关系
S-ID.C.8	correlation coefficient	相关系数
N-Q.A.3	data point	数据点
N-Q.A.2	descriptive modeling	描述性模型
A-SSE.A.1	difference of squares, example: $(a^2 - b^2)$	平方的差
A-SSE.B.3	equivalent monthly interest rate	相等的月利率
F-Bf.B.3	even function	偶函数
A-CED.A.1	exponential equation	指数方程式
S-ID.B.6	fit of a function	函数的适应度
A-REI.D.12	half-plane	半平面
N-V.M.6	incidence relationship (payoff)	关联关系
S-ID.B.5	joint frequency	联合频率
S-ID.C.8	linear fit	最优线性拟合
S-ID.C.8	linear phenomenon	线性现象
S-ID.C.8	linearity	线性, 直线性
A-REI.D.11	logarithm function	对数函数
S-ID.B.5	marginal frequency	边际频数
A-CED.A.3	non-viable options (inequalities)	不可行选择 (不等式)
N-RN.B.3	non-zero rational number	非零的有理数
F-BF.B.3	odd function	奇函数
F-IF.C.8	piece-wise defined function	分段性函数
F-BF.A.1	recursive process	递归过程
S-ID.B.6	residuals	(统计) 残差
A-SSE.A.1	square of a difference, example: $(a - b)^2$	差的平方
F-IF.C.8	step function	步阶 (阶跃) 函数
A-REI.A.1	viable argument	可行的论点
A-CED.A.3	viable options (inequalities)	可行的选择 (不等式)

KEYS

N-Q = Number & Quantity

SSE = Seeing Structures in Expressions

RN = Real Number System

BF = Building Functions

ID = Interpreting categorical and quantitative Data

CED = Creating Equations Describing numbers or relationships

REI = Reasoning with Equations & Inequality

VM = Vectors & Matrix quantities

IF = Interpreting Functions

ID = Interpreting categorical and quantitative Data

APR = Arithmetic with Polynomials & Relational expressions