

Glossary

High School Level Algebra **2** Glossary

English | Simplified Chinese

Translation of Algebra 2 and Trigonometry terms based on the Coursework for Algebra 2 and Trigonometry 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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Algebra 2 and Trigonometry

| English | Simplified Chinese |
|----------------------------|--------------------|
| Problem Solving | 解题 |
| algebraically | 用代数方法、在代数上 |
| alternate approach | 替代方法 |
| collaborate | 合作、协作 |
| conjecture | 推测 |
| constraint | 约束、限制 |
| critique | 评论、批评 |
| equivalent | 等值的 |
| evaluate | 求...值、估计 |
| explain | 解释 |
| formulate | 使公式化、规划、构想出 |
| generalization | 概括化、普遍化 |
| graphically | 图像的 |
| interpret | 解释、阐明 |
| multiple representations | 多重表述 |
| numerically | 数值的 |
| observe | 观察 |
| parameter | 参数 |
| strategy | 策略 |
| verbally | 言辞的、文字上的 |
| Reasoning and Proof | 推论与证明 |
| argument | 论证 |
| axiom | 公理 |
| conclusion | 结论 |
| conjecture | 推测 |
| counterexample | 反例、反证 |
| discover | 发现 |
| exact answer | 精确答案 |
| explain | 解释 |
| explore | 探索 |
| general case | 一般情况 |
| inductive reasoning | 归纳推理 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|-----------------------------|--------------------|
| informal indirect proof | 非正式间接证明 |
| investigate | 调查 |
| justify | 证明 |
| refute | 驳斥、辩驳 |
| specific result | 具体结果 |
| theorem | 定理 |
| Communication | 通信、联络、传送 |
| accuracy | 准确性 |
| appropriate | 适当的 |
| challenge | 挑战 |
| chart | 表、图表 |
| coherent | 一致的、协调的 |
| comprehension | 理解 |
| conjecture | 推测 |
| decoding | 译码、解码 |
| diagram | 图、图表 |
| equation | 方程式 |
| formula | 公式、方程式 |
| function | 函数 |
| graph | 图、作图 |
| interpretation | 解释、阐明 |
| logical argument | 逻辑论证 |
| mathematical representation | 数学表述 |
| numerical tables | 数值表 |
| organize | 组织 |
| outline | 大纲、轮廓 |
| rationale | 逻辑依据、原理的阐述 |
| reflect | 反映、反射出 |
| standard notation | 标准符号 |
| strategy | 策略 |
| symbol | 符号 |
| technical writing | 技术写作 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|--------------------------|--------------------|
| terminology | 术语、专门名词 |
| validity | 有效、有效性 |
| verbal explanation | 口头解释 |
| written explanation | 书面解释 |
| Connections | 连接 |
| concept | 概念 |
| conclusion | 结论 |
| formulate | 使公式化、规划、构想出 |
| multiple representation | 多重表述 |
| physical model | 实体模型 |
| procedure | 过程、程序 |
| quantitative model | 量模型 |
| representation | 表述 |
| Representation | 表述 |
| algebraic representation | 代数表述 |
| apply | 应用、运用、把...施（用）于 |
| chart | 表、图表 |
| communicate | 传达、传递、通讯、交流 |
| compare | 比较 |
| concept | 概念 |
| diagram | 图、图表 |
| equation | 方程式 |
| explore | 探索 |
| graph | 图、作图 |
| graphical representation | 图形表述 |
| investigate | 调查 |
| mathematical phenomena | 数学现象 |
| multiple representations | 多重表述 |
| organize | 组织、安排 |
| physical object | 实体物体 |
| physical phenomena | 物理现象 |
| recognize | 辨识、认出 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|------------------------------------|--------------------|
| 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 |
| a+bi form | a+bi 式 |
| absolute value | 绝对值 |
| complex fraction | 繁分数 |
| complex number | 复数 |
| conjugate | 共轭的 |
| direct variation | 直接变量 |
| e | e |
| fractional exponent | 分数指数 |
| <i>i</i> | <i>i</i> |
| imaginary number | 虚数 |
| index of a radical | 根式的开方次数 |
| inverse variation | 逆变量、反变量 |
| irrational number | 无理数 |
| negative exponent | 负指数 |
| nth root | n次方根 |
| operation | 运算 |
| pi | 圆周率 |
| powers of <i>i</i> | <i>i</i> 的幂/乘方 |
| principal square root | 主平方根 |
| procedure | 过程、程序 |
| radical | 方根 |
| radical form | 根式 |
| radicand | 被开方数 |
| rational number | 有理数 |
| rationalize a denominator | 分母有理化 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|-----------------------------------|--------------------|
| real number | 实数 |
| scientific notation | 科学记数法 |
| sigma | 西格马 |
| sigma notation | 连加号 |
| Algebra | 代数 |
| abscissa | 横坐标 |
| absolute value | 绝对值 |
| absolute value equation | 绝对值方程式 |
| absolute value function | 绝对式函数 |
| absolute value inequality | 绝对值不等式 |
| adjacent angles | 邻角 |
| adjacent sides | 邻边 |
| algebraic expression | 代数表达式 |
| algebraic representation | 代数表述 |
| ambiguous case | 歧例 |
| amplitude | 幅度、幅角、振幅 |
| analyze | 分析、解析 |
| angle | 角 |
| angle in standard position | 标准位置角 |
| angle of depression | 俯角 |
| angle of elevation | 仰角 |
| antilogarithm | 反对数、逆对数 |
| approximate value | 近似值 |
| arc length | 弧长 |
| arccosine | 反余弦 |
| arcsine | 反正弦 |
| arctangent | 反正切 |
| area of a parallelogram using SAS | 用边角边求平行四边形的面积 |
| area of a triangle using SAS | 用边角边求三角形的面积 |
| arithmetic sequence | 算术序列、数列 |
| arithmetic series | 算术级数 |
| asymptote | 渐进线 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|--|--------------------|
| base | 底、底数、基数 |
| base of a logarithmic function | 对数函数的底 |
| base of an exponential function | 指数函数的底 |
| binomial expansion | 二项式展开 |
| binomial theorem | 二项式定理 |
| center-radius equation of a circle | 圆的中心半径公式 |
| central angle | 圆心角 |
| circle | 圆 |
| circular functions | 三角函数 |
| coefficient | 系数 |
| cofunctions | 余函数 |
| common base(s) | 公共底、同底 |
| common difference | 共同区别 |
| common factor | 公因子、公因子 |
| common logarithm | 常用对数 |
| common ratio | 公共比率 |
| completing the square | 配方法 |
| complex fractional expressions | 繁分数表达式 |
| composition of functions | 函数的复合 |
| compound interest | 复利息 |
| constant function | 常数函数 |
| cosecant | 余割 |
| cosine | 余弦 |
| cotangent | 余切 |
| coterminal angles | 共终边的角、同界角 |
| degree of a polynomial | 多项式的次方 |
| difference of two perfect squares | 两个完全平方差 |
| direct variation | 直接变量 |
| discriminant | 判别式 |
| domain | 域、定义域 |
| double and half angle formulas for trigonometric functions | 三角函数的二倍角和半角公式 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|------------------------------------|--------------------|
| double root | 二重根 |
| e | e |
| equation | 方程式 |
| equivalent forms | 等值形式 |
| exact value | 精确值 |
| expand a binomial | 扩展一个二项式 |
| explicit definition | 外显定义 |
| exponential form | 指数形式 |
| exponential function | 指数函数 |
| extraneous root | 增根 |
| factor | 因子、因式、因式分解 |
| fractional exponent | 分数指数 |
| frequency (of a periodic function) | 周期函数的频率 |
| function | 函数 |
| function notation | 函数符号 |
| geometric sequence | 几何序列/几何数列 |
| geometric series | 几何级数 |
| graphical solution of equations | 方程式的图解 |
| greatest common factor (GCF) | 最大公因式 (数) |
| growth factor | 增长系数、增长因子 |
| half-life | 半衰期 |
| horizontal-line test | 水平线测试 |
| i | i |
| identities | 恒等式、恒等 |
| initial side of an angle | 角的始边 |
| inverse function | 反函数 |
| inverse trigonometric functions | 反三角函数反 |
| inverse variation | 反变量、逆变量 |
| Law of Cosines | 余弦定理 |
| Law of Sines | 正弦定理 |
| laws of exponents | 指数定理 |
| laws of logarithms | 对数定理 |
| linear equation | 一次方程、线性方程 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|---------------------------------------|--------------------|
| linear expression | 一次表达式 |
| linear system | 线性系统 |
| logarithm | 对数 |
| logarithmic form | 对数形式 |
| lowest terms | 最简式 |
| nature of the roots | 根的性质 |
| negative exponent | 负指数 |
| n th root | n 次方根 |
| n th term | 第 n 项 |
| one cycle of a trigonometric function | 三角函数的一个周期 |
| one-to-one function | 一对一函数 |
| onto | 在...上、到...上 |
| opposite side in a right triangle | 直角三角形里的对边 |
| ordinate | 纵坐标 |
| parabola | 抛物线 |
| parameter | 参数 |
| period (of a function) | (函数) 的周期 |
| periodic function | 周期函数 |
| phase shift | 周相移动 |
| polynomial expression | 多项式表达式 |
| polynomial function | 多项式函数 |
| powers of i | i 的幂/乘方 |
| Pythagorean identities | 勾股定理 |
| quadrantal angle | 象限角 |
| quadratic equation | 二次方程 |
| quadratic formula | 二次公式、二次求根公式 |
| quadratic inequality | 二次不等式 |
| quadratic trinomial | 二次三项式 (的) |
| radian | 弧度 |
| radical equation | 根式方程 |
| radical expression | 根式表达式 |
| radius | 半径 (单数) |
| range (of a function) | 函数的值域 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|--|--------------------|
| rational coefficient | 有理系数 |
| rational equation | 有理方程式 |
| rational expression | 有理表达式 |
| rational inequality | 有理不等式 |
| rationalize denominators | 分母有理化 |
| reciprocal trigonometric functions | 倒数三角函数 |
| recursive definition | 回归意义、递归意义 |
| reference angle | 参考角、参准角 |
| relation | 关系 |
| replacement set | 变量取值集 |
| represent | 代表 |
| restricted domain | 限制定义域、缩小定义域 |
| resultant | 合量、结式 |
| right triangle trigonometry | 直角三角形的三角法 |
| root of an equation | 方程式的根 |
| secant (of an angle) | (角)的正割/割线 |
| sigma notation | 连加号 |
| sine | 正弦 |
| solution set | 解集 |
| standard position (of an angle) | (角的)标准位置 |
| subset | 子集 |
| sum and product of roots of a quadratic equation | 二次方程式根的和与积 |
| sum of a geometric series | 几何级数的和 |
| sum of an arithmetic series | 算术级数的和 |
| sum or difference formulas for trigonometric functions | 三角函数的和或差的公式 |
| system of equations/inequalities | 方程式/不等式的系统 |
| tangent (of an angle) | (角)的切线 |
| technology | 技术 |
| terminal side of an angle | 角的终边 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|---|--------------------|
| transformation | 变换、转换、变形 |
| transformations of functions and relations | 函数和关系的转换 |
| trigonometric equation | 三角方程式 |
| trigonometric functions | 三角函数 |
| unit circle | 单位圆 |
| variable | 变量 |
| vector | 矢量 |
| vertical line test | 垂直线 |
| zero of a function | 函数的零点 |
| zero product property | 零的积的性质 |
| Geometry | 几何 |
| absolute value | 绝对值 |
| absolute value equation | 绝对值方程式 |
| absolute value inequality | 绝对值不等式 |
| angle in standard position | 标准位置的角 |
| angle of depression | 俯角 |
| angle of elevation | 仰角 |
| area of a parallelogram using SAS | 用边角边求平行四边形的面积 |
| area of a triangle using SAS | 用边角边求三角形的面积 |
| circle | 圆 |
| coefficient | 系数 |
| function | 函数 |
| generalize | 概括化、普遍化 |
| geometric representation of the circular function | 圆函数的几何表述、三角函数的几何表述 |
| graph of a relation | 关系图 |
| graphical representation | 图形表述 |
| graphical solution of equations | 方程式的图解 |
| investigate | 调查 |
| ordered pair | 序对 |
| parabola | 抛物线 |
| rational coefficient | 有理系数 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|-----------------------------------|--------------------|
| rectangular coordinates | 直角 |
| relation | 关系 |
| root of an equation | 方程式的根 |
| sector of a circle | (圆内) 扇形 |
| slope | 斜率、坡度 |
| triangle | 三角形 |
| vertex | 顶点 |
| visualization | 可见性、形象化 |
| Measurement | 测量 |
| arc length | 弧长 |
| degree measure | 以度为单位测量 |
| measure of central angle | 测量圆心角 |
| minute | 分钟 |
| radian measure | 弧度的测量 |
| Statistics and Probability | 统计量与概率 |
| at least | 至少 |
| at most | 至多 |
| Bernouli experiments | 伯努利实验 |
| biased sample | 有偏差的样本 |
| bimodal | 双峰分布、双模态的 |
| binomial probability formula | 二项式概率公式 |
| bivariate data | 二元数据、二变量数据 |
| central tendency | 集中趋势 |
| combination | 组合 |
| compound event | 复合事件 |
| conjecture | 推测 |
| controlled experiment | 被调控的试验 |
| correlation coefficient | 相互关联的系数 |
| Counting Principle | 计数原理、读数原理 |
| exactly | 精确的 |
| experimental probability | 实验概率 |
| extrapolate | 外推 |
| frequency (of a data set) | (数据集的) 频率 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|---------------------------------|-----------------------|
| frequency distribution | 频率分布 |
| grouped frequency distributions | 频率分布群 |
| index in statistics | 统计指标 |
| interpolate | 内推法、内插 |
| interquartile range | 四分位数间距 |
| least squares regression line | 最小平方回归线 |
| line of best fit | 最佳拟合线 |
| linear regression | 线性回归 |
| mean | 平均数 |
| measure of central tendency | 集中趋势测量 |
| measures of dispersion | 离散测量 |
| median | 中位数、中线 |
| mode | 众数 |
| normal curve | 常态曲线、正态曲线 |
| normal distribution | 常态分布 |
| observation | 观察 |
| outlier | 外露层 |
| Pascal's Triangle | 帕斯卡尔三角形 |
| percentile | 百分位数 |
| permutation | 排列 |
| probability | 概率 |
| quartiles | 四分点（的）、四分值（的）、四分位数（的） |
| random sample | 随机样本 |
| range (of a data set) | （数据集的）区域/范围 |
| regression equation | 回归方程式 |
| regression model | 回归模式 |
| sample space | 样本空间 |
| scatter plot | （在直角坐标在线）定点 |
| standard deviation (population) | 标准差、标准偏差（全域） |
| standard deviation (sample) | 标准差、标准偏差（样本） |
| statistics | 统计 |
| survey | 调查表 |
| technology | 技术 |

Algebra 2 and Trigonometry

| English | Simplified Chinese |
|-------------------------|--------------------|
| theoretical probability | 定理概率 |
| univariate data | 单变量的、一元的 |
| variance (population) | 方差（全域） |
| variance (sample) | 方差（样本） |