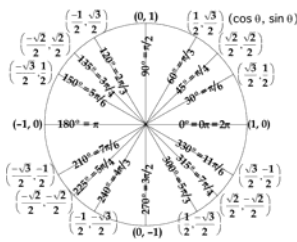


# Glossary

## High School Level Algebra **2** Glossary

English | Traditional 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	Chinese
<b>Problem Solving</b>	<b>解題</b>
algebraically	用代數方法、在代數上
alternate approach	替代方法
collaborate	合作、協作
conjecture	推測
constraint	約束、限制
critique	評論、批評
equivalent	等值的
evaluate	求...值、估計
explain	解釋
formulate	使公式化、規劃、構想出
generalization	概括化、普遍化
graphically	圖像的
interpret	解釋、闡明
multiple representations	多重表述
numerically	數值的
observe	觀察
parameter	參數
strategy	策略
verbally	言辭的、文字上的
<b>Reasoning and Proof</b>	<b>推論與證明</b>
argument	論證
axiom	公理
conclusion	結論
conjecture	推測
counterexample	反例、反證
discover	發現
exact answer	精確答案
explain	解釋
explore	探索

## Algebra 2 and Trigonometry

English	Chinese
general case	一般情況
inductive reasoning	歸納推理
informal indirect proof	非正式間接證明
investigate	調查
justify	證明
refute	駁斥、辯駁
specific result	具體結果
theorem	定理
<b>Communication</b>	<b>通信、聯絡、傳送</b>
accuracy	準確性
appropriate	適當的
challenge	挑戰
chart	表、圖表
coherent	一致的、協調的
comprehension	理解
conjecture	推測
decoding	譯碼、解碼
diagram	圖、圖表
equation	方程式
formula	公式、方程式
function	函數
graph	圖、作圖
interpretation	解釋、闡明
logical argument	邏輯論證
mathematical representation	數學表述
numerical tables	數值表
organize	組織
outline	大綱、輪廓
rationale	邏輯依據、原理的闡述
reflect	反映、反射出
standard notation	標準符號

## Algebra 2 and Trigonometry

English	Chinese
strategy	策略
symbol	符號
technical writing	技術寫作
terminology	術語、專門名詞
validity	有效、有效性
verbal explanation	口頭解釋
written explanation	書面解釋
<b>Connections</b>	<b>連接</b>
concept	概念
conclusion	結論
formulate	使公式化、規劃、構想出
multiple representation	多重表述
physical model	實體模型
procedure	過程、程序
quantitative model	量模型
representation	表述
<b>Representation</b>	<b>表述</b>
algebraic representation	代數表述
apply	應用、運用、把...施(用)於
chart	表、圖表
communicate	傳達、傳遞、通訊、交流
compare	比較
concept	概念
diagram	圖、圖表
equation	方程式
explore	探索
graph	圖、作圖
graphical representation	圖形表述
investigate	調查
mathematical phenomena	數學現象

## Algebra 2 and Trigonometry

English	Chinese
multiple representations	多重表述
organize	組織、安排
physical object	實體物體
physical phenomena	物理現象
recognize	辨識、認出
record	檔案、記錄
social phenomena	社會現象
symbol	符號
table	表、表格
technology	技術
translate	轉化
<b>Number Sense and Operations</b>	<b>數字概念與運算</b>
a+bi form	a+bi 式
absolute value	絕對值
complex fraction	繁分數
complex number	複數
conjugate	共軛的
direct variation	直接變量
$e$	$e$
fractional exponent	分數指數
$i$	$i$
imaginary number	虛數
index of a radical	根式的開方次數
inverse variation	逆變量、反變量
irrational number	無理數
negative exponent	負指數
$n$ th root	$n$ 次方根
operation	運算
pi	圓周率
powers of $i$	$i$ 的冪/乘方
principal square root	主平方根

## Algebra 2 and Trigonometry

English	Chinese
procedure	過程、程序
radical	方根
radical form	根式
radicand	被開方數
rational number	有理數
rationalize a denominator	分母有理化
real number	實數
scientific notation	科學記數法
sigma	西格馬
sigma notation	連加號
<b>Algebra</b>	<b>代數</b>
abscissa	橫坐標
absolute value	絕對值
absolute value equation	絕對值方程式
absolute value function	絕對式函數
absolute value inequality	絕對值不等式
adjacent angles	鄰角
adjacent sides	鄰邊
algebraic expression	代數表達式
algebraic representation	代數表述
ambiguous case	歧例
amplitude	幅度、幅角、振幅
analyze	分析、解析
angle	角
angle in standard position	標準位置角
angle of depression	俯角
angle of elevation	仰角
antilogarithm	反對數、逆對數
approximate value	近似值
arc length	弧長
arccosine	反餘弦

## Algebra 2 and Trigonometry

English	Chinese
arcsine	反正弦
arctangent	反正切
area of a parallelogram using SAS	用邊角邊求平行四邊形的面積
area of a triangle using SAS	用邊角邊求三角形的面積
arithmetic sequence	算術序列、數列
arithmetic series	算術級數
asymptote	漸進線
base	底、底數、基數
base of a logarithmic function	對數函數的底
base of an exponential function	指數函數的底
binomial expansion	二項式展開
binomial theorem	二項式定理
center-radius equation of a circle	圓的中心半徑公式
central angle	圓心角
circle	圓
circular functions	三角函數
coefficient	係數
cofunctions	餘函數
common base(s)	公共底、同底
common difference	共同區別
common factor	公因子、公因數
common logarithm	常用對數
common ratio	公共比率
completing the square	配方法
complex fractional expressions	繁分數表達式
composition of functions	函數的復合
compound interest	復利息
constant function	常數函數
cosecant	餘割
cosine	餘弦
cotangent	餘切
coterminal angles	共終邊的角、同界角



## Algebra 2 and Trigonometry

English	Chinese
degree of a polynomial	多項式的次方
difference of two perfect squares	兩個完全平方差
direct variation	直接變量
discriminant	判別式
domain	域、定義域
double and half angle formulas for trigonometric functions	三角函數的二倍角和半角公式
double root	二重根
$e$	$e$
equation	方程式
equivalent forms	等值形式
exact value	精確值
expand a binomial	擴展一個二項式
explicit definition	外顯定義
exponential form	指數形式
exponential function	指數函數
extraneous root	增根
factor	因子、因式、因式分解
fractional exponent	分數指數
frequency (of a periodic function)	周期函數的頻率
function	函數
function notation	函數符號
geometric sequence	幾何序列/幾何數列
geometric series	幾何級數
graphical solution of equations	方程式的圖解
greatest common factor (GCF)	最大公因式(數)
growth factor	增長係數、增長因子
half-life	半衰期
horizontal-line test	水平線測試
$i$	$i$
identities	恒等式、恒等

## Algebra 2 and Trigonometry

English	Chinese
initial side of an angle	角的始邊
inverse function	反函數
inverse trigonometric functions	反三角函數反
inverse variation	反變量、逆變量
Law of Cosines	餘弦定理
Law of Sines	正弦定理
laws of exponents	指數定理
laws of logarithms	對數定理
linear equation	一次方程、線性方程
linear expression	一次表達式
linear system	線性系統
logarithm	對數
logarithmic form	對數形式
lowest terms	最簡式
nature of the roots	根的性質
negative exponent	負指數
nth root	n次方根
nth term	第n項
one cycle of a trigonometric function	三角函數的一個周期
one-to-one function	一對一函數
onto	在...上、到...上
opposite side in a right triangle	直角三角形裏的對邊
ordinate	縱坐標
parabola	拋物線
parameter	參數
period (of a function)	(函數)的周期
periodic function	周期函數
phase shift	周相移動
polynomial expression	多項式表達式
polynomial function	多項式函數
powers of $i$	$i$ 的冪/乘方
Pythagorean identities	畢氏定理

## Algebra 2 and Trigonometry

English	Chinese
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	二次三項式 (的)
radian	弧度
radical equation	根式方程
radical expression	根式表達式
radius	半徑 (單數)
range (of a function)	函數的值域
rational coefficient	有理係數
rational equation	有理方程式
rational expression	有理表達式
rational inequality	有理不等式
rationalize denominators	分母有理化
reciprocal trigonometric functions	倒數三角函數
recursive definition	回歸意義、遞歸意義
reference angle	參考角、參準角
relation	關係
replacement set	變量取值集
represent	代表
restricted domain	限制定義域、縮小定義域
resultant	合量、結式
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/割線
sigma notation	連加號
sine	正弦
solution set	解集
standard position (of an angle)	(角的)標準位置
subset	子集

## Algebra 2 and Trigonometry

English	Chinese
sum and product of roots of a quadratic equation	二次方程式根的和與積
sum of a geometric series	幾何級數的和
sum of an arithmetic series	算術級數的和
sum or difference formulas for trigonometric functions	三角函數的和或差的公式
system of equations/inequalities	方程式/不等式的系統
tangent (of an angle)	(角)的切線
technology	技術
terminal side of an angle	角的終邊
transformation	變換、轉換、變形
transformations of functions and relations	函數和關係的轉換
trigonometric equation	三角方程式
trigonometric functions	三角函數
unit circle	單位圓
variable	變量
vector	矢量
vertical line test	垂直線
zero of a function	函數的零點
zero product property	零的積的性質
<b>Geometry</b>	<b>幾何</b>
absolute value	絕對值
absolute value equation	絕對值方程式
absolute value inequality	絕對值不等式
angle in standard position	標準位置的角
angle of depression	俯角
angle of elevation	仰角
area of a parallelogram using SAS	用邊角邊求平行四邊形的面積

## Algebra 2 and Trigonometry

English	Chinese
area of a triangle using SAS	用邊角邊求三角形的面積
circle	圓
coefficient	係數
function	函數
generalize	概括化、普遍化
geometric representation of the circular function	圓函數的幾何表述、三角函數的幾何表述
graph of a relation	關係圖
graphical representation	圖形表述
graphical solution of equations	方程式的圖解
investigate	調查
ordered pair	序對
parabola	拋物線
rational coefficient	有理係數
rectangular coordinates	直角
relation	關係
root of an equation	方程式的根
sector of a circle	(圓內)扇形
slope	斜率、坡度
triangle	三角形
vertex	頂點
visualization	可見性、形象化
<b>Measurement</b>	<b>測量</b>
arc length	弧長
degree measure	以度為單位測量
measure of central angle	測量圓心角
minute	分鐘
radian measure	弧度的測量
<b>Statistics and Probability</b>	<b>統計量與概率</b>
at least	至少
at most	至多

## Algebra 2 and Trigonometry

English	Chinese
Bernouli experiments	伯努利實驗
biased sample	有偏差的樣本
bimodal	雙峰分佈、雙模態的
binomial probability formula	二項式概率公式
bivariate data	二元數據、二變量數據
central tendency	集中趨勢
combination	組合
compound event	複合事件
conjecture	推測
controlled experiment	被調控的試驗
correlation coefficient	相互關聯的係數
Counting Principle	計數原理、讀數原理
exactly	精確的
experimental probability	實驗概率
extrapolate	外推
frequency (of a data set)	(數據集的) 頻率
frequency distribution	頻率分佈
grouped frequency distributions	頻率分佈群
index in statistics	統計指標
interpolate	內推法、內插
interquartile range	四分位數間距
least squares regression line	最小平方回歸線
line of best fit	最佳擬合線
linear regression	線性回歸
mean	平均數
measure of central tendency	集中趨勢測量
measures of dispersion	離散測量
median	中位數、中線
mode	眾數
normal curve	常態曲線、正態曲線
normal distribution	常態分佈
observation	觀察
outlier	外露層

## Algebra 2 and Trigonometry

English	Chinese
Pascal's Triangle	巴斯卡三角形
percentile	百分位數
permutation	排列
probability	概率
quartiles	四分點（的）、四分值（的）、四分位數（的）
random sample	隨機樣本
range (of a data set)	（數據集的）區域/範圍
regression equation	回歸方程式
regression model	回歸模式
sample space	樣本空間
scatter plot	（在直角坐標線上）定點
standard deviation (population)	標準差、標準偏差（全域）
standard deviation (sample)	標準差、標準偏差（樣本）
statistics	統計
survey	調查表
technology	技術
theoretical probability	定理概率
univariate data	單變量的、一元的
variance (population)	方差（全域）
variance (sample)	方差（樣本）