

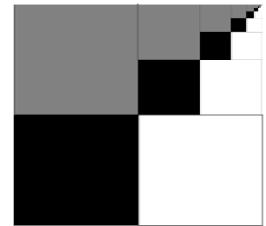
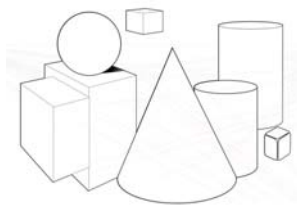
Glossary

High School Level

Geometry Glossary

English | Simplified Chinese

Translation of Geometry terms based on the
Coursework for Geometry 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.

Please click here for the New York State Office of Bilingual Education and World Languages Webpage on "Assessment and Testing Accommodations"





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Geometry

English	Simplified Chinese
Problem Solving	解题
AA triangle similarity	两个角相等 (AA) 的三角形的相似性
AAA triangle similarity	三个角相等 (AAA) 的三角形的相似性
AAS triangle congruence	角角边 (AAS) 三角形的全等性
additive property of equality	相等式加法性质
algorithm	规则系统、算法
apply	应用、运用、把...施(用)于
ASA triangle congruence	角边角 (ASA) 三角形的全等性
conjecture	推测
constraints	约束、限制
construct	作图、构造
discover	发现
dynamic geometry software	动态几何软件
explore	探索
generalization	概括化、普遍化
inductive reasoning	归纳推理
justify	证明
parameters	参数
reason	理由
truth value	真值
valid argument	有效的论证
Reasoning and Proof	推论与证明
AA triangle similarity	两个角相等 (AA) 的三角形的相似性
AAA triangle similarity	三个角相等 (AAA) 的三角形的相似性
AAS triangle congruence	角角边 (AAS) 三角形的全等性
analytical proof	解析证明
angle addition postulate	角相加的公理
ASA triangle congruence	角边角 (ASA) 三角形的全等性
axiom	公理
biconditional	双向条件
conclusion	结论

Geometry

English	Simplified Chinese
conditional statement	条件陈述
conjecture	推测
conjunction	连接
contradiction	矛盾
contrapositive of a statement	逆否语句、经过质位变换产生的语句
converse of a statement	逆语句
counterexample	反例、反证
deductive proof	演绎证明
deductive reasoning	演绎推理
definition	定义
disjunction	分离、分裂
dynamic geometry software	动态几何软件
equivalence relation	等值关系
Euclidean Parallel Postulate	欧几里得平行公理
explain	解释
geometry	几何
hypotenuse and leg triangle congruence	斜边与三角形的直角边的全等性
hypothesis	假设
indirect proof	间接证明
inductive reasoning	归纳推理
inverse of a statement	逆语句
investigate	调查
justify	证明
logical equivalent	逻辑等值
negation	相反、否定
paragraph proof	段落证明法
parallel postulate(s)	平行公理
proof	证明
proof by contradiction	反证法
proportional	成比例的
Pythagorean Theorem	勾股定理、勾股定理
reason	理由
reflexive property of equality	等式自反性

Geometry

English	Simplified Chinese
SAS triangle congruence	边角边 (SAS) 三角形的全等性
SAS Similarity Theorem	边角边 (SAS) 三角形的相似性定理
SSS triangle congruence	边边边 (SSS) 三角形的全等性
substitution property	代入性质
subtraction property of equality	等式减法性质
symmetric property of equality	等式对称性质
theorem	定理
transformational proof	变换证明
transitive property of equality	等式可递性质
truth value	真值
two-column proof	两行式证明
undefined terms	未定义词项
union of sets	并集、合集
valid argument	有效的论证
Communication	通信、联络、传送
axiom	公理
biconditional	双向条件
compound statement	复合陈述
conclusion	结论
conditional statement	条件陈述
conjecture	推测
conjunction	连接
contrapositive of a statement	逆否语句、经过质位变换产生的语句
converse of a statement	逆语句
definition	定义
disjunction	分离、分裂
explain	解释
hypothesis	假设
inverse of a statement	逆语句
justify	证明
negation	相反、否定
theorem	定理

Geometry

English	Simplified Chinese
truth value	真值
undefined terms	未定义词项
Connections	连接
apply	应用、运用、把...施（用）于
compound locus	复合轨迹
discover	发现
intersection of sets	集的交点
investigate	调查
spatial relationships	空间关系
union of sets	并集、合集
Representation	表述
analytical geometry	解析几何
coordinate geometry	坐标几何
definition	定义
Euclidean geometry	欧几里得几何
function	函数
graphical representation	图形表述
locus of points	点的轨迹
logical equivalence	逻辑等值
non-Euclidean geometry	非欧几里得几何
three dimensional space	三维空间
transformational geometry	图形变换几何
two dimensional space	二维空间
Geometric Relationships	几何关系
AA triangle similarity	两个角相等（AA）的三角形的相似性
AAA triangle similarity	三个角相等（AAA）的三角形的相似性
AAS triangle congruence	角角边（AAS）三角形的全等性
ASA triangle congruence	角边角（ASA）三角形的全等性
absolute value	绝对值
acute angle	锐角
acute triangle	锐角三角形

Geometry

English	Simplified Chinese
adjacent angles	邻角
algebraic representation	代数表述
alternate interior angles	内错角
altitude	高线、顶垂线
analytical geometry	解析几何
angle	角
angle bisector	角的等分线
angle measure	角的度量
apothem	边心距
arc	弧
arc measure	弧的度量
area	面积
axis of symmetry	对称轴
base	底（边）、底数、基数
betweeness	中间性、介于
bisector	等分线
center of a circle	圆心
center of a regular polygon	正多边形的中心点
center of gravity	重心
central angle	圆心角
central angle of a regular polygon	正多边形的圆心角
centroid	形心、重心、矩心
chord	弦
circle	圆
circumcenter	外心、外接圆心
circumcircle (about a polygon)	外接圆（多边形）
circumference	圆周
collinear points	共线点
common tangents	公切线
complementary angles	余角
concave polygon	凹多边形
concentric circles	同心圆
concurrent lines	共点线

Geometry

English	Simplified Chinese
cone	圆锥体
congruence	全等
conic sections	圆锥截面
constant of proportionality	比例常数
convex polygon	凸多边形
coordinate geometry	坐标几何
coplanar	共面的
corresponding angles	对应角
corresponding parts	对应部分
corresponding sides	对应边
crossection	交叉部分
cube	立方体
cylinder	圆柱体
definition	定义
diagonals	对角线
diameter	直径
dihedral angle	二面角
distance	距离
distance between a point and a line	点与线之间的距离
distance between two parallel lines	两条平行线之间的距离
distance between two points	两个点之间的距离
dodecahedron	12面体
ellipse	椭圆形
endpoint	端点
equiangular	等角的
equidistant	等距的
equilateral triangle	等边三角形
equilateral polygon	等边多边形
Euclidean Geometry	欧几里得几何
Euclidean Parallel Postulate	欧几里得平行公理
exterior	外部的
exterior angle	外角
external secant segment	外部割线

Geometry

English	Simplified Chinese
face of a polyhedron	多面体的面
foot of an altitude	高线的底部
function	函数
geometric mean	几何平均值
geometry	几何
golden ratio	黄金比例
golden rectangle	黄金长方形
great circle	大圆
hemisphere	半圆
Heron's formula	海伦公式
hexagon	六边形
hypotenuse	(直角三角形中的) 斜边
icosahedron	二十面体
incenter of a polygon	多边形内心
inclination	倾角、斜角
inscribed angle	圆周角
inscribed circle	内切圆
intercepted arc	截弧
intercepts	截距
interior	内部的
intersecting lines	相交直线
isosceles trapezoid	等腰梯形
isosceles triangle	等腰三角形
kite	风筝
lateral area of a prism	棱柱体的侧面积
lateral edge	侧棱
lateral face	侧面
lateral surface	侧表面
legs of a right triangle	直角三角形的直角边
legs of an isosceles trapezoid	等腰梯形的边
length	长
line	线
line segment	线段

Geometry

English	Simplified Chinese
linear pair	一对互为补角的角
locus of points	点的轨迹
major arc	优弧、大于半圆的弧
mean proportional	比例中项
measure of an angle	角的度数
measure of an arc	弧的度量
median of a trapezoid	梯形的中线
median of a triangle	三角形的中线
midpoint	中点
midsegment	中间段
minor arc	小弧、劣弧
n-gon	n边形
non-collinear	不共线的
non-coplanar	不共面的
non-Euclidean geometry	非欧几里得几何
obtuse angle	钝角
obtuse triangle	钝角三角形
octagon	八边形
octahedron	八面体
opposite rays	反向射线
orthocenter	垂心
orthogonal	正交的
parabola	抛物线
parallel line segments	平行线段
parallel lines	平行线
parallelepiped	平行六面体
parallelogram	平行四边形
pentagon	五边形
perimeter	周长
perpendicular bisector	垂直平分线
perpendicular bisector concurrence	垂直平分线交点
perpendicular lines	垂直线
perpendicular planes	垂直面

Geometry

English	Simplified Chinese
pi	圆周率
plane	面
point	点
point of concurrency	交点
point of tangency	切点
polygon	多边形
polyhedron	多面体
prism	棱柱体
product property of proportions	比例的乘积性质
proportional	比例的
pyramid	棱锥、棱锥体
Pythagorean Theorem	勾股定理、勾股定理
quadrant	象限
quadratic equation	二次方程
quadratic formula	二次公式
quadrilateral	四边形
radius	半径
ratio	比率
ray	射线
real numbers	实数
rectangle	长方形
rectangular solid	长方形立体
regular polygon	正多边形
remote interior angles	不相邻内角
rhombus	菱形
right angle	直角
right triangle	直角三角形
scalene triangle	不等边三角形
secant	割线
segment	线段
segment of a circle	弓形
semicircle	半圆
set	集

Geometry

English	Simplified Chinese
similar polygons	相似多边形
similar triangles	相似三角形
simple quadrilateral	简单四边形
skew lines	斜直线
slant height	斜高
slope	斜率、坡度
sphere	球体、球面
square	平方
supplementary angles	互补角
surface area	表面积
tangent segment	切线段
tangent to a circle	圆的切线
tessellation	花纹镶嵌
tetrahedron	四面体
three-dimensional space	三维空间
topology	拓扑学
transformational geometry	图形变换几何
transversal	横截的、横向的
trapezoid	梯形
triangle	三角形
triangle inequality	三角不等式
trigonometry of the right triangle	直角三角形三角学
two-dimensional space	二维空间
vector	矢量
vertex	顶点
vertical angles	对顶角
vertical line	垂直线
volume	体积、容积
x-axis	x-轴
x-intercept	x-截距
y-axis	y-轴
y-intercept	y-截距
z-axis	z-轴

Geometry

English	Simplified Chinese
Constructions	作图、构造
angle bisector	角的等分线
bisector	等分线
center of a regular polygon	正多边形的中心点
center of gravity	重心
circumcircle (about a polygon)	外接圆（多边形）
compass	圆规
construct	作图、构造
dynamic geometry software	动态几何软件
perpendicular bisector	垂直平分线
perpendicular bisector concurrence	垂直平分线交点
perpendicular lines	垂直线
straightedge	边、直尺
Locus	轨迹
circle	圆
compound locus	复合轨迹
ellipse	椭圆
hyperbola	双曲线
locus of points	点的轨迹
parabola	抛物线
Formal and Informal Proofs	正规与非正规证明
AA triangle similarity	两个角相等（AA）的三角形的相似性
AAA triangle similarity	三个角相等（AAA）的三角形的相似性
AAS triangle congruence	角角边（AAS）三角形的全等性
ASA triangle congruence	角边角（ASA）三角形的全等性
angle addition postulate	角相加的公理
axiom	公理
biconditional	双向条件
conclusion	结论
conditional statement	条件陈述
conjecture	推测

Geometry

English	Simplified Chinese
conjunction	连接
contradiction	矛盾
contrapositive of a statement	逆否语句、经过质位变换产生的语句
converse of a statement	逆语句
counterexample	反例、反证
deductive reasoning	演绎推理
definition	定义
disjunction	分离、分裂
dynamic geometry software	动态几何软件
equivalence relation	等值关系
Euclidean Parallel Postulate	欧几里得平行公理
hypotenuse and leg triangle congruence	斜边与三角形的直角边的全等性
indirect proof	间接证明
inductive reasoning	归纳推理
inverse of a statement	逆语句
justify	证明
logical equivalent	逻辑等值
negation	相反、否定
parallel postulate(s)	平行公理
postulate	公理
proof	证明
proof by contradiction	反证法
Pythagorean Theorem	勾股定理、勾股定理
reason	理由
reflexive property of equality	等式自反性
SAS triangle congruence	边角边三角形（SAS）的全等性
SAS Similarity Theorem	边角边三角形（SAS）的相似性定理
SSS triangle congruence	边边边三角形（SSS）的全等性
substitution property	代入性质
subtraction property of equality	等式减法性质
symmetric property of equality	等式对称性质
theorem	定理
transitive property of equality	等式可递性质
transformational proof	变换证明

Geometry

English	Simplified Chinese
truth value	真值
two-column proof	两行式证明
undefined terms	未定义词项
union of sets	并集、合集
valid argument	有效的论证
Transformational Geometry	变换几何
axis of symmetry	对称轴
center of a dilation	膨胀中心
center of a rotation	旋转中心
clockwise (orientation)	顺时针（方向）
composition	复合、合成
constant of proportionality	比例常数
contraction	缩小
counterclockwise (orientation)	逆时针（方向）
dilation	膨胀
direct transformation	直接变换
domain	域、定义域
dynamic geometry software	动态几何软件
fixed point	不动点、固定点
function	函数
function notation for transformations	函数变换符号
glide reflection	滑动反射
group	群
half-turn	转180度
identity	恒等式
image	映像
inverse of a transformation	逆变换
isometry	等距
mapping (function)	映像（函数）
opposite transformation	逆变换
orientation	定方向
preimage	逆象、原象
reflection	反射

Geometry

English	Simplified Chinese
rotation	旋转
rotational symmetry	旋转对称
symmetry	对称
tessellation	花纹镶嵌
transformation	变换
transformational geometry	变换几何
translation	转化
Coordinate Geometry	坐标几何
abscissa	横坐标
analytical geometry	解析几何
analytical proof	解析证明
Cartesian coordinates	直角坐标、笛卡尔坐标
Cartesian plane	笛卡尔平面
center-radius equation of circle	圆的中心-半径公式
coordinate	坐标
coordinate geometry	坐标几何
coordinate plane	坐标平面
distance between two points	两个点之间的距离
origin	原点
point slope equation of a line	线的点斜式方程式
rectangular coordinates	长方形坐标
slope - intercept equation of a line	线的斜截式方程式
three-dimensional space	三维空间
two-dimensional space	二维空间
vector	矢量
x-axis	x-轴
x-intercept	x-截距
y-axis	y-轴
y - intercept	y-截距
z-axis	z-轴

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