

# Glossary

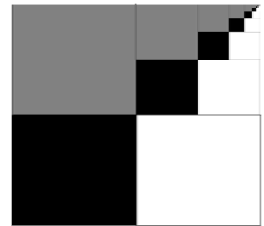
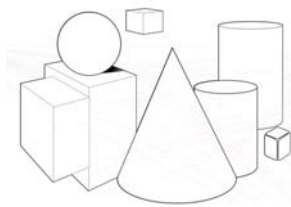
---

## High School Level Geometry Glossary

---

### English / Tagalog

---



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

Word-for-word glossaries are used for testing accommodations for ELL/LEP students

---





THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

---

P-16

Office of Elementary, Middle, Secondary and Continuing Education and Office of Higher Education  
Office of Bilingual Education and Foreign Language Studies

<http://www.emsc.nysed.gov/biling/>

THE UNIVERSITY OF THE STATE OF NEW YORK  
**Regents of the University**

BETTY A. ROSA, <i>Chancellor</i> , B.A., M.S. in Ed., M.S. in Ed., M.Ed., Ed.D. ....	Bronx
T. ANDREW BROWN, <i>Vice Chancellor</i> , B.A., J.D. ....	Syracuse
NAN EILEEN MEAD, B.A. ....	Manhattan
JOSEPHINE VICTORIA FINN, B.A., J.D. ....	Albany
BEVERLY L. OUDERKIRK, B.S., M.S. ....	Saratoga
ELIZABETH S. HAKANSON ....	Onondaga
CATHERINE COLLINS, B.S., M.S., Ph.D. ....	West New York
JAMES R. TALLON, R., B.A., M.A. ....	Binghamton
ROGER TILLES, B.A., J.D. ....	Great Neck
JUDITH JOHNSON, B.A., M.A., Ed.D. ....	Mid-Hudson
LUIS O. REYES, B.A., M.A., Ph.D. ....	New York
LESTER W. YOUNG, JR., B.S., M.S., Ed. D. ....	Oakland Gardens
CHRISTINE D. CEA, B.A., M.A., Ph.D. ....	Staten Island
WADE S. NORWOOD, B.A. ....	Rochester
JUDITH CHIN, B.S., M.S., ....	Queens
KATHLEEN M. CASHIN, B.S., M.S., Ed.D. ....	Brooklyn
JAMES E. COTTRELL, B.S., M.D. ....	New York

**Commissioner of Education**

**President of The University of the State of New York**

MARY ELLEN ELIA

**Executive Deputy Commissioner**

ELIZABETH BERLIN

---

The State Education Department does not discriminate on the basis of age, color, religion, creed, disability, marital status, veteran status, national origin, race, gender, genetic predisposition or carrier status, or sexual orientation in its educational programs, services and activities. Portions of this publication can be made available in a variety of formats, including Braille, large print or audio tape, upon request. Inquiries concerning this policy of nondiscrimination should be directed to the Department's Office for Diversity, Ethics, and Access, Room 530, Education Building, Albany, NY 12234. Requests for additional copies of this publication may be made by contacting the Publications Sales Desk, Room 319, Education Building, Albany, NY 12234.

**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

<b>ENGLISH / INGLES</b>	<b>TAGALOG</b>
<b>Problem Solving</b>	<b>Paglutas ng Problema</b>
AA triangle similarity	Pagkakatulad ng tatsulok na AA
AAA triangle similarity	Pagkakatulad ng tatsulok na AAA
AAS triangle congruence	Congruence ng tatsulok na AAS
additive property of equality	katangiang additive ng equality
algorithm	algorithm
apply	i-apply
ASA triangle congruence	Congruence ng tatsulok na ASA
conjecture	haka-haka
constraints	mga restriksiyon
construct	bumuo
discover	tuklasin
dynamic geometry software	software para sa dynamic na geometry
explore	galugarin
generalization	heneralisasyon
inductive reasoning	Inductive na pangangatwiran
justify	i-justify
parameters	mga parameter
reason	mangatwiran
truth value	halaga ng katotohanan
valid argument	balidong argument
<b>Reasoning and Proof</b>	<b>Pangangatwiran at Pagpapatunay</b>
AA triangle similarity	Pagkakatulad ng tatsulok na AA
AAA triangle similarity	Pagkakatulad ng tatsulok na AAA
AAS triangle congruence	Congruence ng tatsulok na AAS
analytical proof	analytical proof
angle addition postulate	batayan ng pagdagdag ng anggulo
ASA triangle congruence	Congruence ng tatsulok na ASA
axiom	axiom
biconditional	biconditional
conclusion	konklusyon
conditional statement	conditional na pahayag
conjecture	haka-haka
conjunction	conjunction
contradiction	contradiction
contrapositive of a statement	contrapositive ng isang pahayag
converse of a statement	converse ng isang pahayag
counterexample	counterexample
deductive proof	deductive na katumayan
deductive reasoning	deductive na pangangatwiran
definition	kahulugan
disjunction	disjunction
dynamic geometry software	software para sa dynamic na geometry
equivalence relation	equivalence relation

**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

<b>ENGLISH / INGLES</b>	<b>TAGALOG</b>
Euclidean Parallel Postulate	Euclidean Parallel Postulate
explain	ipaliwanag
geometry	geometry
hypotenuse and leg triangle congruence	congruence ng hypotenuse at ng binti ng tatsulok
hypothesis	hypothesis
indirect proof	hindi direktang katunayan
inductive reasoning	inductive na pangangatwiran
inverse of a statement	kabaliktaran ng pahayag
investigate	imbestigahan
justify	bigyang katwiran
logical equivalence	logical na equivalence
negation	negation
paragraph proof	Talataang katunayan
parallel postulate (s)	(mga) parallel na postulate
proof	katunayan
proof by contradiction	katunayan sa pamamagitan ng pagkakasalungatan
proportional	proportional
Pythagorean Theorem	Pythagorean na Teorama
reason	mangatwiran
reflexive property of equality	reflexive property ng equality
SAS triangle congruence	congruence ng tatsulok na SAS
SAS similarity theorem	pagkakatulad ng SAS na teorama
SSS triangle congruence	congruence ng tatsulok na SSS
substitution property	substitution property
subtraction property of equality	subtraction na katangian ng equality
symmetric property of equality	symmetric na katangian ng equality
theorem	teorama
transformational proof	transformational na pagpapatunay
transitive property of equality	transitive na katangian ng equality
truth value	halaga ng katotohanan
two-column proof	two-column proof
undefined terms	mga term na undefined
union of sets	union ng mga set
valid argument	balidong argument
<b>Communication</b>	<b>Komunikasyon</b>
axiom	axiom
bi-conditional	bi-conditional
compound statement	compound na pahayag
conclusion	conclusion
conjecture	haka-haka
conjunction	conjunction
contrapositive of a statement	contrapositive ng isang pahayag
definition	kahulugan
disjunction	disjunction
explain	ipaliwanag

**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

<b>ENGLISH / INGLES</b>	<b>TAGALOG</b>
hypothesis	hypothesis
Inverse of a statement	Kabaliktaran ng pahayag
justify	bigyang katwiran
negation	negation
theorem	teorama
truth value	halaga ng katotohanan
undefined terms	mga term na undefined
<b>Connections</b>	<b>Mga Koneksyon</b>
apply	i-apply
compound locus	compound locus
discover	tuklasin
intersection of sets	intersection ng mga set
investigate	imbestigahan
spatial relationships	mga spatial na relasyon
union of sets	union ng mga set
<b>Representation</b>	<b>Representasyon</b>
analytical geometry	analytical geometry
coordinate geometry	coordinate geometry
definition	mangatwiran
Euclidean geometry	Euclidean na geometry
function	function
graphical representation	graphical na representasyon
locus of points	locus ng puntos
logical equivalence	logical na equivalence
non-Euclidean geometry	hindi Euclidean na geometry
three dimensional space	three dimensional na espasyo
transformational geometry	transformational na geometry
two dimensional space	two dimensional na espasyo
<b>Geometric Relationships</b>	<b>Mga Geometry ng Relasyon</b>
AA triangle similarity	Pagkakatulad ng tatsulok na AA
AAA triangle similarity	Pagkakatulad ng tatsulok na AAA
AAS triangle congruence	Congruence ng tatsulok na AAS
ASA triangle congruence	Congruence ng tatsulok na ASA
absolute value	absolute na halaga
acute angle	acute na anggulo
acute triangle	acute na tatsulok
adjacent angles	mga katabing anggulo
algebraic representation	algebraic na representasyon
alternate interior angles	alternatibong panloob na mga anggulo
altitude	altitude
analytical geometry	analytical na geometry
angle	anggulo
angle bisector	bisector ng anggulo

**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

ENGLISH / INGLES	TAGALOG
angle measure	sukat ng anggulo
apothem	apothem
arc	arko
arc measure	sukat ng arko
area	area
axis of symmetry	axis ng symmetry
base	base
betweenness	betweenness
bisector	bisector
center of a circle	sentro ng bilog
center of a regular polygon	sentro ng isang regular na polygon
center of gravity	sentro ng gravity
central angle	gitnang anggulo
central angle of a regular polygon	gitnang anggulo ng isang regular na polygon
centroid	centroid
chord	chord
circle	bilog
circumcenter	circumcenter
circumcircle (about a polygon)	circumcircle (tungkol sa polygon)
circumference	circumference
collinear points	mga collinear na puntos
common tangents	mga katulad na tangent
complementary angles	mga complementary na anggulo
concave polygon	concave na polygon
concentric circles	mga concentric na bilog
concurrent lines	mga concurrent na linya
cone	cone
congruence	congruence
conic sections	mga conic na seksyon
constant of proportionality	constant ng proportionality
convex polygon	convex na polygon
coordinate geometry	coordinate na geometry
coplanar	coplanar
corresponding angles	mga corresponding na anggulo
corresponding parts	mga corresponding na bahagi
corresponding side	corresponding na gilid
cross-section	cross-section
cube	cube
cylinder	silindro
definition	mangatwiran
diagonal	diagonal
diameter	diyametro
dihedral angle	dihedral angle
distance	layo
distance between a point and a line	layo sa pagitan ng isang punto at linya
distance between two parallel lines	layo sa pagitan ng dalawang magkahilerang linya

**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

ENGLISH / INGLES	TAGALOG
distance between two points	layo sa pagitan ng dalawang puntos
dodecahedron	dodecahedron
ellipse	ellipse
endpoint	endpoint
equiangular	equiangular
equidistant	magkasing-layo
equilateral triangle	equilateral na tatsulok
equilateral polygon	equilateral na polygon
Euclidean Geometry	Euclidean na Geometry
Euclidean Parallel Postulate	Euclidean Parallel Postulate
exterior	panlabas
exterior angle	panlabas na anggulo
external secant segment	panlabas na secant na bahagi
face of a polyhedron	harapan ng isang polyhedron
foot of an altitude	sukat sa talampakan ng kataasan
function	function
geometric mean	geometric na mean
geometry	geometry
golden ratio	gintong ratio
golden rectangle	gintong rektanggulo
great circle	great circle
hemisphere	hemisphere
Heron's formula	formula ni Heron
hexagon	hexagon
hypotenuse	hypotenuse
icosahedron	icosahedron
in center of a polygon	nasa gitna ng polygon
inclination	inclination
inscribed angle	inscribed na anggulo
inscribed circle	inscribed na bilog
intercepted arc	intercepted na arko
intercepts	intercepts
interior	panloob
intersecting lines	mga nag-i-intersect na linya
isosceles trapezoid	isosceles na trapezoid
isosceles triangle	isosceles na tatsulok
kite	saranggola
lateral area of a prism	lateral na area ng prism
lateral edge	lateral na gilid
lateral face	lateral na harap
lateral surface	lateral na surface
legs of a right triangle	mga binti ng kanang tatsulok
legs of a isosceles trapezoid	mga binti ng isosceles na trapezoid
length	haba
line	linya
line segment	bahagi ng linya

**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

ENGLISH / INGLES	TAGALOG
linear pair	pares na linya
locus of points	locus ng puntos
major arc	major arc
mean proportional	mean proportional
measure of an angle	sukat ng anggulo
measure of an arc	sukat ng arko
median of a trapezoid	median ng trapezoid
median of a triangle	median ng tatsulok
midpoint	gitnang puntos
mid-segment	gitna ng bahagi
minor arc	minor na arko
n-gon	n-gon
non-collinear	hindi magka-collinear
non-coplanar	hindi magka-coplanar
non-Euclidean geometry	hindi Euclidean na geometry
obtuse angle	obtuse na anggulo
obtuse triangle	obtuse na tatsulok
octagon	octagon
octahedron	octahedron
opposite rays	magkabilang mga sinag
orthocenter	orthocenter
orthogonal	orthogonal
parabola	parabola
parallel line segments	magkahilerang mga bahagi ng linya
parallel lines	magkahilerang mga linya
parallelepiped	parallelepiped
parallelogram	parallelogram
pentagon	pentagon
perimeter	perimeter
perpendicular bisector	perpendicular na tagahati
perpendicular bisector concurrence	perpendicular na tagahating concurrence
perpendicular lines	mga perpendicular na linya
perpendicular planes	mga perpendicular na plane
pi	pi
plane	plane
point	punto
point of concurrency	punto ng concurrency
point of tangency	punto ng tangency
polygon	polygon
polyhedron	polyhedron
prism	prisma
product property of proportions	katangian ng produkto ng mga proporsiyon
proportional	proporsiyonal
pyramid	pyramid
Pythagorean Theorem	Pythagorean na Teorama
quadrant	quadrant



**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

ENGLISH / INGLES	TAGALOG
quadratic equation	quadratic na equation
quadratic formula	quadratic na formula
quadrilateral	quadrilateral
radius	radius
ratio	ratio
ray	sinag
real numbers	mga real na numero
rectangle	rektanggulo
rectangular solid	solidong rektanggulo
regular polygon	regular na polygon
remote interior angles	mga remote na panloobang anggulo
rhombus	rhombus
right angle	kanang anggulo
right triangle	kanan na tatsulok
scalene triangle	scalene na tatsulok
secant	secant
segment	bahagi
segment of a circle	bahagi ng bilog
semicircle	kalahating bilog
set	set
similar polygons	mga magkakatulad na polygon
similar triangles	mga magkatulad na tatsulok
simple quadrilateral	simpleng quadrilateral
skew lines	mga skew na linya
slant height	taas ng slant
slope	slope
sphere	globo
square	parisukat
supplementary angles	mga suplementong anggulo
surface area	area ng surface
tangent segment	tangent na bahagi
tangent to a circle	tangent sa isang bilog
tessellation	tessellation
tetrahedron	tetrahedron
three-dimensional space	three-dimensional na espasyo
topology	topology
transformational geometry	transformational na geometry
transversal	transversal
trapezoid	trapezoid
triangle	tatsulok
triangle inequality	inequality ng tatsulok
trigonometry of the right triangle	trigonometry ng kanan na tatsulok
two-dimensional space	two-dimensional na espasyo
vector	vector
vertex	vertex
vertical angles	mga vertical na anggulo

**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

ENGLISH / INGLES	TAGALOG
vertical line	vertical na linya
volume	volume
x-axis	x-na axis
x-intercept	x-intercept
y-axis	y-axis
y-intercept	y-intercept
z-axis	z-axis
Constructions	Mga konstruksiyon
angle bisector	bisector ng anggulo
bisector	bisector
center of a regular polygon	sentro ng isang regular na polygon
center of gravity	sentro ng gravity
circumcircle (about a polygon)	circumcircle (tungkol sa polygon)
compass	compass
construct	bumuo
dynamic geometry software	software para sa dynamic na geometry
perpendicular bisector	perpendicular na tagahati
perpendicular bisector concurrence	perpendicular na tagahating concurrence
perpendicular lines	mga perpendicular na linya
straightedge	straightedge
Locus	Locus
circle	bilog
compound locus	compound locus
ellipse	ellipse
hyperbola	hyperbola
locus of points	locus ng puntos
parabola	parabola
Formal and Informal Proofs	Mga Pormal at Impormal na Pagpapatunay
AA triangle similarity	Pagkakatulad ng tatsulok na AA
AAA triangle similarity	Pagkakatulad ng tatsulok na AAA
AAS triangle congruence	Congruence ng tatsulok na AAS
ASA triangle congruence	Congruence ng tatsulok na ASA
angle addition postulate	batayan ng pagdagdag ng anggulo
axiom	axiom
bi-conditional	bi-conditional
conclusion	konklusyon
conditional statement	kondisyonal na pahayag
conjecture	haka-haka
conjunction	conjunction
contradiction	pagkakasalungatan
contrapositive of a statement	contrapositive ng isang pahayag
converse of a statement	converse ng isang pahayag
counterexample	counterexample

**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

<b>ENGLISH / INGLES</b>	<b>TAGALOG</b>
deductive reasoning	deductive na pangangatwiran
definition	mangatwiran
disjunction	disjunction
dynamic geometry software	software para sa dynamic na geometry
equivalence relation	equivalence relation
Euclidean Parallel Postulate	Euclidean Parallel Postulate
hypotenuse and leg triangle congruence	congruence ng hypotenuse at ng binti ng tatsulok
indirect proof	hindi direktang katunayan
inductive reasoning	inductive na pangangatwiran
inverse of a statement	kabaliktaran ng pahayag
justify	bigyang katwiran
logical equivalent	logical na equivalent
negation	negation
parallel postulate (s)	(mga) parallel postulate
postulate	postulate
proof	katunayan
proof by contradiction	katunayan sa pamamagitan ng pagkakasalungatan
Pythagorean Theorem	Pythagorean na Teorama
reason	mangatwiran
reflexive property of equality	reflexive property ng equality
SAS triangle congruence	SAS congruence ng tatsulok
SAS similarity Theorem	SAS similarity theorem
SSS triangle congruence	SSS congruence ng tatsulok
substitution property	substitution property
subtraction property of equality	subtraction property ng equality
symmetric property of equality	symmetric property ng equality
theorem	teorama
transitive property of equality	transitive property ng equality
transformational proof	transformational na pagpapatunay
truth value	halaga ng katotohanan
two-column proof	two-column na pagpapatunay
undefined terms	mga term na undefined
union of sets	union ng mga set
valid argument	balidong argument
<b>Transformational Geometry</b>	<b>Transformational Geometry</b>
axis of symmetry	axis ng symmetry
center of a dilation	sentro ng dilation
center of a rotation	sentro ng rotation
clockwise (orientation)	clockwise (oryentasyon)
composition	komposisyon
constant of proportionality	constant ng proportionality
contraction	contraction
counterclockwise (orientation)	counterclockwise (oryentasyon)
dilation	dilation
direct transformation	direktang transformation

**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

<b>ENGLISH / INGLES</b>	<b>TAGALOG</b>
domain	domain
dynamic geometry software	software para sa dynamic na geometry
fixed point	fixed point
function	function
function notation for transformations	function notation para sa mga transformation
glide reflection	glide reflection
group	pangkat
half-turn	kalahating-pihit
identity	identity
image	imahe
inverse of a transformation	inverse ng transformation
isometric	isometric
mapping (function)	mapping (function)
opposite transformation	opposite na transformation
orientation	oryentasyon
pre-image	pre-image
reflection	reflection
rotation	pagpihit
rotational symmetry	rotational symmetry
symmetry	symmetry
tessellation	tessellation
transformation	transformation
transformational geometry	transformational na geometry
translation	translation
transformational geometry	transformational na geometry
translation	translation
<b>Coordinate Geometry</b>	<b>Coordinate Geometry</b>
abscissa	abscissa
analytical geometry	analytical na geometry
analytical proof	analytical na pagpapatunay
Cartesian coordinates	Mga Cartesian coordinate
Cartesian plane	Cartesian plane
center-radius equation of circle	center-radius equation ng bilog
coordinate	coordinate
coordinate geometry	coordinate na geometry
coordinate plane	coordinate plane
distance between two points	layo sa pagitan ng dalawang puntos
origin	origin
point slope equation of a line	point slope equation ng linya
rectangular coordinates	mga rektanggulong coordinate
slope - intercept equation of a line	slope - intercept equation ng linya
three-dimensional space	three-dimensional na espasyo
two-dimensional space	two-dimensional na espasyo
vector	vector
x-axis	x-axis

**GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL**  
**GLOSARYO NG GEOMETRY - HIGH SCHOOL NA ANTAS**

<b>ENGLISH / INGLES</b>	<b>TAGALOG</b>
x-intercept	x-intercept
y-axis	y-axis
y-intercept	y-intercept
z-axis	z-axis