

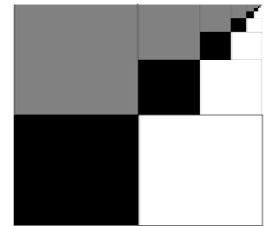
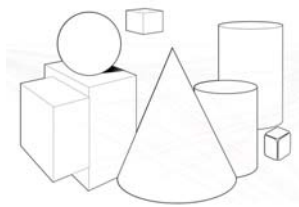
# Glossary

High School Level

## Geometry Glossary

English | Malay

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.

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## GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL

<b>ENGLISH</b>	<b>MALAY</b>
<b>Problem Solving</b>	<b>Penyelesaian Masalah</b>
AA triangle similarity	kesamaan segi tiga AA
AAA triangle similarity	kesamaan segi tiga AAA
AAS triangle congruence	keserasian segitiga AAS
additive property of equality	sifat persamaan aditif
algorithm	algoritma
apply	memohon
ASA triangle congruence	keserasian segitiga ASA
conjecture	konjektur
constraints	kekangan
construct	membina
discover	temui
dynamic geometry software	perisian geometri dinamik
explore	meneroka
generalization	generalisasi
inductive reasoning	penaakulan induktif
justify	mewajarkan
parameters	parameter
reason	sebab
truth value	nilai kebenaran
valid argument	hujah sah
<b>Reasoning and Proof</b>	<b>Taakulan dan Bukti</b>
AA triangle similarity	Kesamaan segi tiga AA
AAA triangle similarity	Kesamaan segi tiga AAA
AAS triangle congruence	keserasian segitiga AAS
analytical proof	bukti analisis
angle addition postulate	postulat tambahan sudut
ASA triangle congruence	keserasian segitiga ASA
axiom	aksiom
biconditional	kondisi ganda
conclusion	kesimpulan
conditional statement	kenyataan bersyarat
conjecture	konjektur
conjunction	konjungsi
contradiction	percanggahan
contrapositive of a statement	kontrapositif pernyataan
converse of a statement	konvers kenyataan
counterexample	kontra contoh
deductive proof	bukti deduktif
deductive reasoning	penaakulan deduktif
definition	definisi
disjunction	disjungsi
dynamic geometry software	perisian geometri dinamik
equivalence relation	hubungan kesetaraan
Euclidean Parallel Postulate	Euclidean Parallel Postulate

## GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL

ENGLISH	MALAY
explain	terangkan
geometry	geometri
hypotenuse and leg triangle congruence	hipotenus dan kakinya segitiga kongruen
hypothesis	hipotesis
indirect proof	bukti tidak langsung
inductive reasoning	penaakulan induktif
inverse of a statement	songsang kenyataan
investigate	menyiasat
justify	mewajarkan
logical equivalence	kesetaraan logik
negation	Penafian
paragraph proof	bukti perenggan
parallel postulate (s)	postulat selari
proof	bukti
proof by contradiction	bukti dengan percanggahan
proportional	berkadat
Pythagorean Theorem	Teorema Pythagorean
reason	sebab
reflexive property of equality	sifat refleksif kesaksamaan
SAS triangle congruence	keserasian segitiga SAS
SAS similarity theorem	SAS teorem kesamaan
SSS triangle congruence	keserasian segitiga SSS
substitution property	harta gantian
subtraction property of equality	harta penolakan kesamaan
symmetric property of equality	harta persamaan simetri
theorem	teorem
transformational proof	bukti transformasi
transitive property of equality	sifat persamaan transitif
truth value	nilai kebenaran
two-column proof	bukti dua lajur
undefined terms	terma tidak jelas
union of sets	kesatuan set
valid argument	hujah yang sah
<b>Communication</b>	<b>Komunikasi</b>
axiom	aksiom
bi-conditional	kondisi ganda
compound statement	pernyataan kompaun
conclusion	kesimpulan
conjecture	konjektur
conjunction	konjunksi
contrapositive of a statement	kontrapositif suatu pernyataan
definition	definisi
disjunction	disjunksi
explain	terangkan
hypothesis	hipotesis
Inverse of a statement	Songsang kenyataan

## GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL

ENGLISH	MALAY
justify	mewajarkan
negation	penafian
theorem	teorem
truth value	nilai kebenaran
undefined terms	terma tidak jelas
Connections	Hubungan
apply	memohon
compound locus	lokus kompaun
discover	temui
intersection of sets	persimpangan set
investigate	menyiasat
spatial relationships	hubungan spasial
union of sets	kesatuan set
Representation	Pewakilan
analytical geometry	geometri analisis
coordinate geometry	menyelaraskan geometri
definition	definisi
Euclidean geometry	geometri Euclidean
function	fungsi
graphical representation	perwakilan grafik
locus of points	lokus titik
logical equivalence	kesetaraan logik
non-Euclidean geometry	geometri bukan Euclidean
three dimensional space	ruang tiga dimensi
transformational geometry	geometri transformasi
two dimensional space	dua dimensi ruang
Geometric Relationships	Hubungan Geometri
AA triangle similarity	Kesamaan segi tiga AA
AAA triangle similarity	Kesamaan segi tiga AAA
AAS triangle congruence	keserasian segitiga AAS
ASA triangle congruence	keserasian segitiga ASA
absolute value	nilai mutlak
acute angle	sudut akut
acute triangle	segi tiga akut
adjacent angles	sudut bersebelahan
algebraic representation	perwakilan algebra
alternate interior angles	sudut pedalaman alternatif
altitude	ketinggian
analytical geometry	geometri analisis
angle	sudut
angle bisector	pembahagi dua sama sudut
angle measure	langkah sudut
apothem	apothem
arc	lengkuk

## GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL

ENGLISH	MALAY
arc measure	langkah lengkok
area	kawasan
axis of symmetry	paksi simetri
base	asas
betweenness	antara
bisector	pembahagi dua sama sudut
center of a circle	pusat bulatan
center of a regular polygon	pusat poligon tetap
center of gravity	pusat graviti
central angle	sudut tengah
central angle of a regular polygon	sudut pusat poligon tetap
centroid	centroid
chord	kord
circle	bulatan
circumcenter	circumcenter
circumcircle (about a polygon)	circumcircle (sekitar poligon)
circumference	lilitan
collinear points	titik collinear
common tangents	tangen biasa
complementary angles	sudut pelengkap
concave polygon	poligon cekung
concentric circles	bulatan sepusat
concurrent lines	garisan serentak
cone	kon
congruence	kесerasian
conic sections	bahagian kerucut
constant of proportionality	pengadaran yang berterusan
convex polygon	poligon cembung
coordinate geometry	menyelaraskan geometri
coplanar	coplanar
corresponding angles	sudut sepadan
corresponding parts	bahagian yang sepadan
corresponding side	sebelah yang sama
cross-section	keratan rentas
cube	kubus
cylinder	silinder
definition	definisi
diagonal	pepenjuru
diameter	diameter
dihedral angle	sudut dihedral
distance	jarak
distance between a point and a line	jarak antara titik dan garisan
distance between two parallel lines	jarak antara dua garis selari
distance between two points	jarak antara dua titik
dodecahedron	dodecahedron
ellipse	ellipse
endpoint	titik akhir

## GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL

ENGLISH	MALAY
equiangular	bersamaan
equidistant	equidistant
equilateral triangle	segitiga sama sisi
equilateral polygon	poligon sama sisi
Euclidean Geometry	Geometri Euclidean
Euclidean Parallel Postulate	Euclidean Parallel Postulate
exterior	luar
exterior angle	sudut luaran
external secant segment	segmen seger luaran
face of a polyhedron	muka polistron
foot of an altitude	kaki ketinggian
function	fungsi
geometric mean	maksud geometri
geometry	geometri
golden ratio	nisbah emas
golden rectangle	persegi panjang emas
great circle	bulatan yang hebat
hemisphere	hemisfera
Heron's formula	Formula Heron
hexagon	heksagon
hypotenuse	hipotenus
icosahedron	icosahedron
in center of a polygon	di tengah poligon
inclination	kecenderungan
inscribed angle	sudut tertulis
inscribed circle	bulatan tertera
intercepted arc	busur dipintas
intercepts	memintas
interior	dalaman
intersecting lines	garis bersilang
isosceles trapezoid	trapezoid isosceles
isosceles triangle	segitiga isosceles
kite	layang-layang
lateral area of a prism	kawasan sisi prisma
lateral edge	kelebihan sisi
lateral face	muka sisi
lateral surface	permukaan sisi
legs of a right triangle	kaki segitiga kanan
legs of a isosceles trapezoid	kaki dari trapezoid isosceles
length	panjang
line	talian
line segment	segmen garisan
linear pair	pasangan linear
locus of points	lokus titik
major arc	lengkok utama
mean proportional	min berkadar
measure of an angle	ukuran sudut

## GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL

ENGLISH	MALAY
measure of an arc	ukuran lengkok
median of a trapezoid	median trapezoid
median of a triangle	median segitiga
midpoint	titik tengah
mid-segment	pertengahan segmen
minor arc	lengkok kecil
n-gon	n-gon
non-collinear	bukan kollinear
non-coplanar	bukan coplanar
non-Euclidean geometry	geometri bukan Euclidean
obtuse angle	sudut cakah
obtuse triangle	segi tiga cakah
octagon	oktagon
octahedron	octahedron
opposite rays	sinar bertentangan
orthocenter	ortocenter
orthogonal	ortogonal
parabola	parabola
parallel line segments	segmen garisan selari
parallel lines	garisan selari
parallelepiped	parallelepiped
parallelogram	paralelogram
pentagon	pentagon
perimeter	perimeter
perpendicular bisector	pengikis seranjang
perpendicular bisector concurrence	persetujuan bisektor seranjang
perpendicular lines	garisan seranjang
perpendicular planes	plan seranjang
pi	pi
plane	plan
point	titik
point of concurrency	titik keserentakan
point of tangency	titik tangency
polygon	poligon
polyhedron	polyhedron
prism	prisma
product property of proportions	sifat produk perkadaran
proportional	berkadar
pyramid	piramid
Pythagorean Theorem	Teorema Pythagorean
quadrant	kuadran
quadratic equation	persamaan kuadratik
quadratic formula	formula kuadratik
quadrilateral	segi empat
radius	radius
ratio	nisbah
ray	ray



## GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL

ENGLISH	MALAY
real numbers	nombor sebenar
rectangle	segi empat tepat
rectangular solid	pepejal segi empat tepat
regular polygon	poligon biasa
remote interior angles	sudut pedalaman jauh
rhombus	rombus
right angle	sudut kanan
right triangle	segi tiga kanan
scalene triangle	segitiga scalene
secant	secant
segment	segmen
segment of a circle	segmen bulatan
semicircle	separuh bulatan
set	ditetapkan
similar polygons	poligon yang serupa
similar triangles	segitiga serupa
simple quadrilateral	segiempat mudah
skew lines	garis condong
slant height	ketinggian slant
slope	cerun
sphere	sfera
square	persegi
supplementary angles	sudut tambahan
surface area	kawasan permukaan
tangent segment	segmen tangen
tangent to a circle	tangen ke bulatan
tessellation	tessellation
tetrahedron	tetrahedron
three-dimensional space	ruang tiga dimensi
topology	topologi
transformational geometry	geometri transformasi
transversal	transversal
trapezoid	trapezoid
triangle	segi tiga
triangle inequality	ketidaksamaan segitiga
trigonometry of the right triangle	trigonometri segi tiga yang betul
two-dimensional space	ruang dua dimensi
vector	vektor
vertex	puncak
vertical angles	sudut menegak
vertical line	garis menegak
volume	kelantangan
x-axis	paksi x
x-intercept	x-intercept
y-axis	paksi y
y-intercept	y-intercept
z-axis	paksi z

## GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL

ENGLISH	MALAY
<b>Constructions</b>	<b>Pembinaan</b>
angle bisector	pembahagi dua sama sudut
bisector	pemisah
center of a regular polygon	pusat poligon tetap
center of gravity	Pusat graviti
circumcircle (about a polygon)	circumcircle (sekitar poligon)
compass	kompas
construct	membina
dynamic geometry software	perisian geometri dinamik
perpendicular bisector	pengikis seranjang
perpendicular bisector concurrence	persetujuan bisektor seranjang
perpendicular lines	garisan seranjang
straightedge	tepi lurus
<b>Locus</b>	<b>Lokus</b>
circle	bulatan
compound locus	lokus kompaun
ellipse	ellipse
hyperbola	hiperbola
locus of points	lokus titik
parabola	parabola
<b>Formal and Informal Proofs</b>	<b>Bukti Rasmi dan Tidak Rasmi</b>
AA triangle similarity	Kesamaan segi tiga AA
AAA triangle similarity	Kesamaan segi tiga AAA
AAS triangle congruence	keserasian segitiga AAS
ASA triangle congruence	keserasian segitiga ASA
angle addition postulate	postulat tambahan sudut
axiom	aksiom
bi-conditional	kondisi ganda
conclusion	kesimpulan
conditional statement	kenyataan bersyarat
conjecture	konjektur
conjunction	konjungsi
contradiction	percanggahan
contrapositive of a statement	kontrapositif suatu pernyataan
converse of a statement	konvers kenyataan
counterexample	kontra contoh
deductive reasoning	penaakulan deduktif
definition	definisi
disjunction	disjungsi
dynamic geometry software	perisian geometri dinamik
equivalence relation	hubungan kesetaraan
Euclidean Parallel Postulate	Euclidean Parallel Postulate
hypotenuse and leg triangle congruence	hipotenus dan kakinya segitiga kongruen
indirect proof	bukti tidak langsung

## GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL

ENGLISH	MALAY
inductive reasoning	penaakulan induktif
inverse of a statement	songsang kenyataan
justify	mewajarkan
logical equivalent	bersamaan logik
negation	Penafian
parallel postulate (s)	postulat selari
postulate	postulate
proof	bukti
proof by contradiction	bukti dengan percanggahan
Pythagorean Theorem	Teorema Pythagorean
reason	sebab
reflexive property of equality	sifat refleksif kesaksamaan
SAS triangle congruence	keserasian segitiga SAS
SAS similarity Theorem	Teorem kesamaan SAS
SSS triangle congruence	keserasian segitiga SSS
substitution property	harta gantian
subtraction property of equality	harta penolakan kesamaan
symmetric property of equality	harta persamaan simetri
theorem	teorem
transitive property of equality	sifat persamaan transitif
transformational proof	bukti transformasi
truth value	nilai kebenaran
two-column proof	bukti dua lajur
undefined terms	terma tidak jelas
union of sets	kesatuan set
valid argument	hujah yang sah
<b>Transformational Geometry</b>	<b>Geometri Transformasi</b>
axis of symmetry	paksi simetri
center of a dilation	pusat pelepasan
center of a rotation	pusat putaran
clockwise (orientation)	mengikut arah jam (orientasi)
composition	komposisi
constant of proportionality	pengadaran yang berterusan
contraction	penguncupan
counterclockwise (orientation)	lawan jam (orientasi)
dilation	pelebaran
direct transformation	transformasi langsung
domain	domain
dynamic geometry software	perisian geometri dinamik
fixed point	titik tetap
function	fungsi
function notation for transformations	notasi fungsi untuk transformasi
glide reflection	mencerminkan refleksi
group	kumpulan
half-turn	separuh pusingan
identity	identiti

## GEOMETRY GLOSSARY - HIGH SCHOOL LEVEL

ENGLISH	MALAY
image	imej
inverse of a transformation	songsang transformasi
isometric	isometrik
mapping (function)	pemetaan (fungsi)
opposite transformation	transformasi bertentangan
orientation	orientasi
pre-image	pra-imej
reflection	pantulan
rotation	putaran
rotational symmetry	simetri putaran
symmetry	simetri
tessellation	tessellation
transformation	transformasi
transformational geometry	geometri transformasi
translation	terjemahan
transformational geometry	geometri transformasi
translation	terjemahan
<b>Coordinate Geometry</b>	<b>Geometri Koordinat</b>
abscissa	abscissa
analytical geometry	geometri analisis
analytical proof	bukti analisis
Cartesian coordinates	Koordinat Cartesian
Cartesian plane	plan Cartesian
center-radius equation of circle	persamaan radius tengah bulatan
coordinate	koordinat
coordinate geometry	geometri koordinat
coordinate plane	plan koordinat
distance between two points	jarak antara dua titik
origin	asal
point slope equation of a line	Lereng titik persamaan garisan
rectangular coordinates	koordinat segi empat tepat
slope - intercept equation of a line	lereng - memintas persamaan garis
three-dimensional space	ruang tiga-dimensi
two-dimensional space	ruang dua-dimensi
vector	vektor
x-axis	paksi-x
x-intercept	pintasan-x
y-axis	paksi-y
y-intercept	pintasan-y
z-axis	paksi-z

## NYS Grades 9 – 12 Math Terms Addenda

Common Core Math Standard	ENGLISH	MALAY
N-RN.B.3	non-zero rational number	nombor nisbah bukan sifar
A-SSE.A.1	difference of squares, example: $(a^2 - b^2)$	perbezaan kuasa dua, contoh: $(a^2 - b^2)$
A-SSE.A.1	square of a difference, example: $(a - b)^2$	kuasa dua perbezaan, contoh: $(a - b)^2$
A-SSE.B.3	equivalent monthly interest rate	kadar faedah bulanan setara
A-CED.A.1	exponential equation	persamaan eksponen
A-CED.A.3	non-viable options (inequalities)	pilihan tidak berdaya maju (ketidaksamaan)
A-CED.A.3	viable options (inequalities)	pilihan berdaya maju (ketidaksamaan)
A-REI.A.1	viable argument	argumen berdaya maju
A-REI.D.12	half-plane	setengah satah
A-REI.D.11	logarithm function	fungsi logaritma
F-IF.C.8	piece-wise defined function	fungsi takrifan cebis demi cebis
F-IF.C.8	step function	fungsi langkah
F-IF.C.8	absolute-value function	fungsi nilai mutlak
F-BF.A.1	recursive process	proses rekursif
F-Bf.B.3	even function	fungsi genap
F-BF.B.3	odd function	fungsi ganjil
F-LE.A.1	constant percent rate	kadar peratus malar
S-ID.B.5	categorical data	data kategori
S-ID.B.5	joint frequency	kekerapan bersama
S-ID.B.5	marginal frequency	kekerapan marginal
S-ID.B.5	conditional relative frequency	kekerapan relatif bersyarat
S-ID.B.6	fit of a function	sesuai dengan fungsi
S-ID.B.6	residuals	baki
S-ID.C.8	correlation coefficient	pekali korelasi
S-ID.C.8	linear fit	padan linear
S-ID.C.9	correlation and causation	korelasi dan penyebab
S-ID.C8	linearity	kelinearan
S-ID.C8	linear phenomenon	fenomena linear
N-Q.A.3	data point	titik data
N.C.N.4	complex plane	satah kompleks
N.C.N.5	conjugation of complex numbers	konjugasi nombor kompleks
N-V.M.6	incidence relationship (payoff)	hubungan insiden (pembayaran)
N-Q.A.2	descriptive modeling	pemodelan deskriptif
S-REI.A.2	algebraic manipulation	manipulasi algebra

### 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