

# Glossary

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**High School Level**

## Integrated Algebra Glossary

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**English / Malay**

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

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

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## High School Integrated Algebra

<b>ENGLISH</b>	<b>MALAY</b>
<b>Problem Solving</b>	<b>Penyelesaian Masalah</b>
algebraically	secara algebra
concept	konsep
conjecture	konjektur
constraint	kekangan
equivalent	bersamaan
formulate	merumuskan
generalization	generalisasi
graphically	secara grafik
multiple representations	pelbagai perwakilan
numerically	secara numerik
parameter	parameter
pattern	corak
relative efficiency	kecekapan relatif
strategy	strategi
verbally	secara lisan
<b>Reasoning and Proof</b>	<b>Taakulan dan Bukti</b>
Appropriate	Sesuai
approximation	penghampiran
argument	hujah
claim	tuntutan
conclusion	kesimpulan
conjecture	konjektur
counterexample	counterexample
explain	terangkan
inductive reasoning	penalaran induktif
logical argument	hujah logik
mathematical conjecture	konjektur matematik
proof	bukti
refute	menyangkal
systematic approach	pendekatan sistematik
validity	kesahan
Venn diagram	Gambar rajah Venn
verify	sahkan

## High School Integrated Algebra

<b>ENGLISH</b>	<b>MALAY</b>
<b>Communication</b>	<b>Komunikasi</b>
accuracy	ketepatan
analyze	menganalisis
argument	hujah
coherent	koheren
communicate	berkomunikasi
comprehension	pemahaman
conclusion	kesimpulan
conjecture	konjektur
decoding	penyahkodan
elicit	memperlihatkan
equation	persamaan
evaluate	menilai
extend	memanjangkan
formula	formula
function	fungsi
graph	graf
interpretation	tafsiran
mathematical visual	visual matematik
rationale	rasional
standard (mathematical) notation	notasi piawaian (matematik)
strategy	strategi
table	jadual
technical writing	penulisan teknikal
terminology	terminologi
valid	sah
<b>Connections</b>	<b>Hubungan</b>
coherent whole	keseluruhan koheren
concept	konsep
connection	sambungan
formulate	merumuskan
physical model	model fizikal
procedure	prosedur

## High School Integrated Algebra

<b>ENGLISH</b>	<b>MALAY</b>
quantitative model	model kuantitatif
representation	perwakilan
<b>Representation</b>	<b>Pewakilan</b>
angle of elevation	sudut ketinggian
array	tatasusunan
chart	carta
compare	bandingkan
diagram	gambar rajah
equation	persamaan
function	fungsi
graph	graf
interpret	mentafsirkan
mathematical phenomena	fenomena matematik
organize	menyusun
physical phenomena	fenomena fizikal
profit	keuntungan
record	rekod
social phenomena	fenomena sosial
symbol	simbol
table	jadual
technology	teknologi
translate	menterjemah
<b>Number Sense and Operations</b>	<b>Bentuk Nombor dan Operasi</b>
absolute value	nilai mutlak
algebraic problem	masalah algebra
arithmetic operation	operasi aritmetik
arrangements (permutations)	perkiraan (permutasi)
associative property	ciri-ciri bersekutu
closure property	ciri-ciri penutupan
commutative property	ciri-ciri commutative
counting techniques	teknik mengira
decimal	perpuluhan
denominator	penyebut

## High School Integrated Algebra

ENGLISH	MALAY
discount	diskaun
distributive property	ciri-ciri pengedaran
exponential expression	ekspresi eksponen
expression	ungkapan
factorial	faktorial
field	medan
fraction	pecahan
Fundamental Counting Principle	Prinsip Pengiraan Asas
group	kumpulan
identity property	ciri-ciri identiti
inverse property	ciri-ciri songsang
like/unlike radical terms	seperti/tidak seperti istilah radikal
number theory	teori nombor
numerator	pengangka
percent of increase/decrease	peratus peningkatan/penurunan
product	produk
properties of the Real numbers	ciri-ciri nombor Nyata
proportionality/direct variation	perkadaran/ variasi langsung
quotient	hasil bahagi
radical	radikal
radicand	radicand
real numbers	nombor sebenar
scientific notation	notasi saintifik
simplest form	bentuk paling mudah
variable	pembolehubah
<b>Algebra</b>	<b>Algebra</b>
acute angle	sudut akut
adjacent side/angle	sebelah/sudut bersebelahan
algebraic equation	persamaan algebra
algebraic expression	ungkapan algebra
algebraic fraction	pecahan algebra
analyze	menganalisis
axis of symmetry	paksi simetri
binomial	binomial

## High School Integrated Algebra

ENGLISH	MALAY
coefficient	pekali
common base	asas umum
complement of a subset	pelengkap subset
coordinates	koordinat
cosine	kosinus
dependent	bergantung
difference of two perfect squares	perbezaan dua kuadrat yang sempurna
element	elemen
equation	persamaan
exponent	eksponen
exponential growth and decay	pertumbuhan dan pereputan eksponen
expression	ungkapan
factoring	pemfaktoran
fractional expression	ungkapan pecahan
greatest common factor (GCF)	faktor umum yang paling besar (GCF)
hypotenuse	hipotenus
independent variable	pembolehubah bebas
inequality	ketidaksamaan
integer	integer
integral coefficient	pekali integral
integral exponent	eksponen bersepadu
integral root(s)	akar integral
intersection of sets	persimpangan set
interval notation	notasi selang waktu
lead coefficient	pekali plumbum
legs of a right triangle	kaki segitiga tepat
line parallel to the x- or y-axis	garis selari dengan paksi x atau y
linear equation in one variable	persamaan linear dalam satu pembolehubah
linear inequality in one variable	ketidaksamaan linear dalam satu
literal equation	persamaan literal
lowest terms fraction	pecahan istilah terendah
monomial	monomial
multiplication property of zero	ciri-ciri pendaraban sifar
opposite side/angle	bertentangan/sudut
parabola	parabola

## High School Integrated Algebra

ENGLISH	MALAY
parallel	selari
polynomial	polinomial
product	produk
properties of exponents	ciri-ciri eksponen
proportion	perkadaran
Pythagorean Theorem	Teorem Pythagorean
quadratic equation	persamaan kuadratik
quantitative	kuantitatif
quotient	hasil bahagi
ratio	nisbah
relation	hubungan
right angle	sudut tepat
right triangle	segi tiga tepat
root(s) of an equation	akar persamaan
roster form	bentuk jadual
set	ditetapkan
set-builder notation	notasi pembina set
sine	sinus
slope	cerun
solution set	set penyelesaian
subset	subset
sum	jumlah
system of linear inequalities	sistem ketaksamaan linear
systems of linear equations	sistem persamaan linear
tangent	tangen
translate (from verbal to symbolic)	menterjemah (dari lisan ke simbolik)
trigonometry	trigonometri
trinomial	trinomial
undefined	tidak ditakrif
union of sets	kesatuan set
universal set	set universal
variable	pembolehubah
verbal expression	ungkapan lisan
verbal sentence	ayat lisan
vertex	bucu



## High School Integrated Algebra

ENGLISH	MALAY
x-axis	paksi-x
y-axis	paksi-y
Geometry	Geometri
absolute value function	fungsi nilai mutlak
angle	sudut
area	kawasan
axis of symmetry of a parabola	paksi simetri parabola
circle	bulatan
coefficient	pekali
cylinder	silinder
decagon	dekagon
exponential function	fungsi eksponen
function	fungsi
generalize	umumkan
geometric shape	bentuk geometri
graph of a relation	graf hubungan
hexagon	heksagon
investigate	menyiasat
nonagon	nonagon
octagon	oktagon
ordered pair	memerintah pasangan
parabolic function	fungsi parabola
parallelogram	segi empat selari
pentagon	pentagon
perimeter	perimeter
polygon	poligon
quadrilateral	sisiempat
quarter-circle	bulatan suku
rational coefficient	pekali rasional
rectangle	segi empat tepat
rectangular solid	pepejal segi empat tepat
regular polygon	poligon biasa
relation	hubungan
rhombus	rombus

## High School Integrated Algebra

<b>ENGLISH</b>	<b>MALAY</b>
roots of a parabolic function	akar fungsi parabola
sector of a circle	sektor bulatan
semi-circle	separuh bulatan
spatial reasoning	penaakulan spatial
square	empat segi
surface area	kawasan permukaan
trapezoid	trapezoid
triangle	segi tiga
vertex	bucu
visualization	visualisasi
volume	kelantangan
<b>Measurement</b>	<b>Ukuran</b>
appropriate unit	unit yang bersesuaian
conversion	penukaran
cubic unit	unit padu
error	ralat
linear measure	ukuran linear
linear unit	unit linear
magnitude	magnitud
measurement system	sistem ukuran
rate	kadar
relative error	ralat relatif
square unit	unit persegi
unit	unit
<b>Statistics and Probability</b>	<b>Statistik dan Kebarangkalian</b>
appropriateness	kesesuaian
biased	berat sebelah
bivariate	bivariat
box-and-whisker plot	petak box-and-whisker
calculated probability	kebarangkalian dikira
categorize	mengkategorikan
causation	penyebab
central tendency	kecenderungan utama

## High School Integrated Algebra

ENGLISH	MALAY
complement	pelengkap
conditional probability	kebarangkalian bersyarat
correlation	korelasi
cumulative frequency distribution table	jadual edaran kekerapan kumulatif
cumulative frequency histogram	histogram kekerapan kumulatif
data	data
dependent events	peristiwa bergantung
dependent variable	pembolehubah bergantung
element	elemen
empirical probability	kebarangkalian empirikal
experimental design	reka bentuk eksperimen
extrapolation	ekstrapolasi
favorable event	peristiwa digemari
finite sample space	ruang sampel yang terhingga
five statistical summary	lima ringkasan statistik
frequency distribution table	jadual pengedaran frekuensi
histogram	histogram
independent events	peristiwa bebas
independent variable	pembolehubah bebas
interpolation	interpolasi
line of best fit	garis terbaik
linear transformation	transformasi linear
maximum	maksimum
mean	maksudnya
measure of central tendency	ukuran kecenderungan pusat
median	median
minimum	minimum
mode	mod
mutually exclusive events	peristiwa saling eksklusif
not mutually exclusive events	peristiwa bukan saling eksklusif
percentile rank	peringkat persentil
probability	kebarangkalian
qualitative	kualitatif
quantitative	kuantitatif

## High School Integrated Algebra

<b>ENGLISH</b>	<b>MALAY</b>
quartiles (specifically: first, second, third or lower, middle, upper)	kuartil (khusus: pertama, kedua, ketiga atau bawah, tengah, atas)
range	julat
sample space	ruang sampel
scatter plot	plot bersepah
series	siri
univariate	univariat

## 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