

# Glossary

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**High School Level**

## Integrated Algebra Glossary

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**English / Fulani**

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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>FULANI</b>
<b>Problem Solving</b>	<b>Safrude Cadeele</b>
algebraically	xono aljabar
concept	miijo
conjecture	ñakkere
constraint	caadeele
equivalent	poddo
formulate	fiiilde
generalization	fof
graphically	windugol wo be deesinay
multiple representations	daranaande hewudo
numerically	limal
parameter	peewnital
pattern	siifa
relative efficiency	feewnannde hatitiinde
strategy	feere
verbally	e haala
<b>Reasoning and Proof</b>	<b>Numuki e Seyda</b>
Appropriate	poddo
approximation	fodde
argument	yyiyannde
claim	naamndaade
conclusion	tongitgol
conjecture	ñakkere
counterexample	misaal jeddoo
explain	faamnude
inductive reasoning	hanjilantaagal e yiyannde
logical argument	daliilo nanniido
mathematical conjecture	ñakkere matematikjooni
proof	firnde
refute	salaade
systematic approach	feere diggunde
validity	goonjingol
Venn diagram	Jagaraam mo Ween
verify	yeewtinaade

## High School Integrated Algebra

<b>ENGLISH</b>	<b>FULANI</b>
<b>Communication</b>	<b>Maatootiro</b>
accuracy	tim mugol
analyze	wittude
argument	yyande
coherent	yaadaani
communicate	jokkondirde
comprehension	faamuya
conclusion	tongitgol
conjecture	tolno huunde
decoding	gasgol
elicit	leernude
equation	ko andaaka
evaluate	betde
extend	juutnude
formula	mandirgal
function	gollirgol
graph	winndugol
interpretation	pirtugol
mathematical visual	yyannde matematik
rationale	fawi ka xakkille
standard (mathematical) notation	binndol (kalkiil) mo waylotaako
strategy	feere
table	taabal
technical writing	binndol karalle
terminology	innirgol
valid	jabaado
<b>Connections</b>	<b>Jokke</b>
coherent whole	njubundi kawrundi
concept	miijo
connection	jokkere
formulate	fiilde
physical model	siifa mbaadi
procedure	gollugol

## High School Integrated Algebra

<b>ENGLISH</b>	<b>FULANI</b>
quantitative model	siifa xeewudo
representation	hoollugol
<b>Representation</b>	<b>Sifaaji</b>
angle of elevation	rukku cuutgol
array	laggal laañal
chart	diidi
compare	fonndude
diagram	kollirgal
equation	ngel mo anndaaka
function	jahirgal
graph	winndugol
interpret	firtude
mathematical phenomena	kew matematik
organize	fewjude
physical phenomena	kew
profit	ngañaari
record	naattinde
social phenomena	kew renndo
symbol	mandarga
table	taabal
technology	karalle
translate	firtude
<b>Number Sense and Operations</b>	<b>Hakkiilo Limngal e Kuudɛ</b>
absolute value	maana
algebraic problem	cadeele aljbar
arithmetic operation	darnde limal
arrangements (permutations)	baylugol (baylagol)
associative property	jeyannde mo waylata
closure property	jeyannde sokkugol
commutative property	jeyannde waylagol
counting techniques	feere limgol
decimal	e limoore
denominator	limo laabi

## High School Integrated Algebra

ENGLISH	FULANI
discount	ustaare
distributive property	jeyannde serndugol
exponential expression	kollitgol manɗol
expression	kollitgol
factorial	mo yaata e faktoor
field	duula
fraction	feccere
Fundamental Counting Principle	Laawol Limre Teenɗudo
group	fedde
identity property	jeyannde fottingol
inverse property	jeyannde waylagol
like/unlike radical terms	kelme teenɗinde nanndufe/de nanndaani
number theory	yyannde limore
numerator	limorgal
percent of increase/decrease	pursataas beydaare/ustaare
product	porodiwi
properties of the Real numbers	jeyannde Limde Teenɗinde
proportionality/direct variation	feccere/baylogol gol selaani
quotient	mo hedda ta e serndagol
radical	teenɗudo
radicand	radikaan
real numbers	limde teenɗinde
scientific notation	binndol siyaatifiik
simplest form	mbaadi burndi famɗude
variable	baylotoongel
Algebra	Aljabar
acute angle	rukku mo egg
adjacent side/angle	adsastan cobɓundu/rukku
algebraic equation	ngel mo andaaka aljabar
algebraic expression	kollitgol aljabar
algebraic fraction	feccere aljabar
analyze	wittude
axis of symmetry	toɓɓere feccoore
binomial	diidoo

## High School Integrated Algebra

ENGLISH	FULANI
coefficient	ƒeydowo laabi
common base	baas gooto
complement of a subset	timminngal huunde
coordinates	jokkooje
cosine	kosiniis
dependent	jowiido e
difference of two perfect squares	ceertide kaare parfe diddi
element	huunde
equation	ngel mo andaaka
exponent	ƒeydow laabi
exponential growth and decay	fodde laabi huundi ƒeydoto
expression	kollitgol
factoring	tongude
fractional expression	kollitgol feccere
greatest common factor (GCF)	tongoowo gooto mo buri mawnu (FGMBM)
hypotenuse	paliido rukku
independent variable	baylotoongel mo yowitaaki
inequality	ƒurondirgol
integer	naannude
integral coefficient	peccirgel no fotiri
integral exponent	esponanseel no fitiri
integral root(s)	ƒaƒol/ƒaƒi no fotiri
intersection of sets	palingal
interval notation	binndol hakkunde
lead coefficient	peccirgel gardingel
legs of a right triangle	koyde tiriyangal dura
line parallel to the x- or y-axis	taraasu cawondiirdi ka aksu x wala y
linear equation in one variable	ngel mo andaaka be jokkindiri ka
linear inequality in one variable	ngel mo andaaka be jokkindiri ka
literal equation	ngel mo andaaka litaraal
lowest terms fraction	feccere limre ƒurnde famƒudet
monomial	gooto
multiplication property of zero	jeyande miltipilikaason xay batte
opposite side/angle	sobbundu/rukku caawndiido
parabola	diidol ooŋingol

## High School Integrated Algebra

ENGLISH	FULANI
parallel	cawondirdi
polynomial	ka polinoom gooto
product	porodiwi
properties of exponents	jeyannde esponanseelu ji
proportion	ceernde
Pythagorean Theorem	yyannde Pitaagor
quadratic equation	ngel mo andaaka mokaara
quantitative	keewal
quotient	heedde serndugol
ratio	limre
relation	jokkondiral
right angle	rukku potdo
right triangle	tiriyangal potdo
root(s) of an equation	ɗaɗol (ɗaɗi) ko andaaka
roster form	mbaadi tabulo
set	wadde
set-builder notation	windugol baɗgol ma'di
sine	siniis
slope	yorsoorbe
solution set	dabba peejee
subset	feccere huunde
sum	hakke
system of linear inequalities	feere ko andaaka be jokkindiri
systems of linear equations	feere ko andaaka be jokkindiri
tangent	tansan
translate (from verbal to symbolic)	firtu (ka xaala e mandarga)
trigonometry	tirigometiri
trinomial	tatoo
undefined	leernaaka
union of sets	fawindirgol
universal set	utii mo sansa ta
variable	wariyaabul
verbal expression	haala
verbal sentence	konɗol haala
vertex	werteks



## High School Integrated Algebra

ENGLISH	FULANI
x-axis	aksu-x
y-axis	aksu-y
Geometry	Jeomeetiri
absolute value function	kollitgol maana
angle	rukku
area	nokku
axis of symmetry of a parabola	aksu wo simetiri mo diidol ooñingol
circle	jirliido
coefficient	koyisiyan
cylinder	mbaadi bargal
decagon	seengo sappo
exponential function	kollitgol manɗol
function	kollitgol
generalize	rendinnde
geometric shape	mbaadi jeomeetiri
graph of a relation	winndu jokkondiral
hexagon	sengo jeedidi
investigate	dabbu
nonagon	sengo jeenay
octagon	sengo jeetati
ordered pair	peer mo be jokkindiri
parabolic function	kollitgol parabool
parallelogram	paraleellogaraam
pentagon	sengo jooy
perimeter	perimeeter
polygon	polygon
quadrilateral	kadirlateer
quarter-circle	pecce nay serkal
rational coefficient	feccere limre
rectangle	rektaanjal
rectangular solid	tedduɗum rektaanjal
regular polygon	dewɗo laawol
relation	jokkondiral
rhombus	losaas

## High School Integrated Algebra

<b>ENGLISH</b>	<b>FULANI</b>
roots of a parabolic function	dowdy kollitgol mo diidol ooŋingol
sector of a circle	nokku mu serkal
semi-circle	feccere serkal
spatial reasoning	miijo ka asamaan
square	kaare
surface area	sifaas sengo
trapezoid	tarapees
triangle	tiriyangal
vertex	werteks
visualization	jiigol
volume	dille
<b>Measurement</b>	<b>Poondol</b>
appropriate unit	gedel mo fotti
conversion	gossondiral
cubic unit	gedel kib
error	faljigol
linear measure	ponndugol mo jokkindiri
linear unit	gedel mo jokkindiri
magnitude	maŋŋu
measurement system	feere poondol
rate	tolno
relative error	faljigol mom daraaka
square unit	gedel kaare
unit	gedel
<b>Statistics and Probability</b>	<b>Ɓeto Lime e Baawgol Wonnde</b>
appropriateness	yandirde
biased	nguriido
bivariate	wariye laabi dīdī
box-and-whisker plot	buwaat e wiska poloot
calculated probability	baawgol wonnde mo be kakilii
categorize	sernde
causation	wattugol
central tendency	siifa mo woni hakunnde

## High School Integrated Algebra

ENGLISH	FULANI
complement	timminno
conditional probability	baawlugol wonnde
correlation	jokkondirgol
cumulative frequency distribution table	taabalu fecceregol mo ferekaas be ukkindiri
cumulative frequency histogram	ukkindirgol fereekaasu istogaraam
data	kabaruuji
dependent events	kewuuji jowtiidfi
dependent variable	baylotoongel jowtiido
element	huunde
empirical probability	baawgol wonnde mo espiiriyaas
experimental design	siifa espiiriyaas
extrapolation	yalltiin
favorable event	kew moyfo
finite sample space	nokku mo gaynii
five statistical summary	dabbinngol beto lime joy
frequency distribution table	tabolo mo serndugol ferekaas
histogram	istogaraam
independent events	kewuuji jowtiidfi
independent variable	baylotoogel jowtiingel
interpolation	naatinnde ndeer winndigol ka faljigol
line of best fit	taraasugo mo buri fewude
linear transformation	taraasformaaso mo jokkindiri
maximum	keewal
mean	firtude
measure of central tendency	poondol mo siifa hakkunde
median	hakkunde
minimum	huri famdude
mode	siifa
mutually exclusive events	keewuji jaltinaadi denndudfi
not mutually exclusive events	kewuuji jatinaadi di denndaani
percentile rank	tolno temedere mo wariyaabul kala
probability	baawgol wonnde
qualitative	moyfere huunde
quantitative	keewal

## High School Integrated Algebra

ENGLISH	FULANI
quartiles (specifically: first, second, third or lower, middle, upper)	moyfere tattoo mo kala wariyabul (surtu: foloo, diddo, tatto wala buri famdi, hakunnde, buri xeewu de)
range	tolno
sample space	nokku mo be beti
scatter plot	suudu mo gasaani
series	fedde
univariate	baylogol gootol

## NYS Grades 9 – 12 Math Terms Addenda

Common Core Math Standard	ENGLISH	FULANI
N-RN.B.3	non-zero rational number	limngal walaa hownde jabaangal
A-SSE.A.1	difference of squares, example: $(a^2 - b^2)$	ittuki nder cukoyaaaji, yeru: $(a^2 - b^2)$
A-SSE.A.1	square of a difference, example: $(a - b)^2$	sukoyoo ittol, yeru: $(a - b)^2$
A-SSE.B.3	equivalent monthly interest rate	kewtal duudal besdaari lewru
A-CED.A.1	exponential equation	potal sowaangal
A-CED.A.3	non-viable options (inequalities)	date de kebtataa (njaadataa)
A-CED.A.3	viable options (inequalities)	date mburtinayde (njaadataa)
A-REI.A.1	viable argument	haala potuka
A-REI.D.12	half-plane	senndere-njayri
A-REI.D.11	logarithm function	jahargal loogaaritm
F-IF.C.8	piece-wise defined function	jahargal burtinaangal cenndaangal
F-IF.C.8	step function	jahargal yaabannde
F-IF.C.8	absolute-value function	jahargal tummbiingal nder gedal
F-BF.A.1	recursive process	pudditoowal
F-Bf.B.3	even function	jahargal potungal
F-BF.B.3	odd function	jahargal jooral
F-LE.A.1	constant percent rate	duudal teemerre dariingal
S-ID.B.5	categorical data	kebal laabngal
S-ID.B.5	joint frequency	jomindiral nannde
S-ID.B.5	marginal frequency	jomindiral peccal
S-ID.B.5	conditional relative frequency	jomindiral teemawal
S-ID.B.6	fit of a function	hewta jomindiral
S-ID.B.6	residuals	luttaanooji
S-ID.C.8	correlation coefficient	nanndootiro
S-ID.C.8	linear fit	hewta diidi
S-ID.C.9	correlation and causation	nanndal e sabaabu
S-ID.C8	linearity	diidiiku
S-ID.C8	linear phenomenon	diidiiku kew
N-Q.A.3	data point	darorde kebal
N.C.N.4	complex plane	njayri cukkundi
N.C.N.5	conjugation of complex numbers	hawtindiro limde cukkude
N-V.M.6	incidence relationship (payoff)	nanndootiral fofaano (yobida)
N-Q.A.2	descriptive modeling	tinndintoonde
S-REI.A.2	algebraic manipulation	mbadu aljabaru

### 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