



Isigama sesiXhosa

Statistics

IsiXhosa Glossary



PanSALB
PAN SOUTH AFRICAN LANGUAGE BOARD



	English Term	IsiXhosa Equivalent	English Definition	IsiXhosa definition
	A			
1	Abcissa	abhusisa; isinqamlezisi	1. The horizontal or x-coordinate of a point in a Cartesian plane.	1. Ukunqamleza okanye indawo elungeleleneyo engu-x kumgangatho othe tyaba we-Cartesian. umgama ophakathi ko-x no-y.
2	Absolute frequency Absolute frequency (example of 1)	uphindaphindo olugqibeleleyo	1. The count or number of individual elements observed in a group or class. 2. The number of occurrences of an event; for example, in 100 tosses of a die, the absolute frequency of odd numbers may be 47.	1. Ubalo okanye inani lezakhi ezizimeleyo elibonwa kwiqela okanye uvidi. 2. Inani lezenzeko zesiganeko; umzekelo, kwimijulo eli-100 yedayisi, uphindaphindo olupheleleyo lokwenzeka lwamanani angumqakathi lunokuba ngama-47.
3	Absolute value	umlinganiselo wesithuba opheleleyo	1. The distance of a number from 0 on the number line. Absolute values are also called numerical values.	1. Umgama wenani ukusuka ku-0 kumgca-manani. Amaxabiso apheleleyo nawo kananjalo abizwa amaxabiso amanani.
4	Accuracy Accuracy (example of 5)	ukuchaneka; uchaneke	1. The degree of closeness between a numerical quantity measured or calculated to its actual value. 2. The level of accuracy of a measurement is the number of significant digits.	1. Iqondo lokusondelelana phakathi kobuninzi benani obulinganisiweyo okanye elibalwe ukuya kwixabiso lalo lokwenene. 2. Umgangatho wokuchaneka komlinganiso linani lemivo ebalulekileyo.
5	Acute angle	atyhuthi engile; iengile ebazileyo; imbombo ebazileyo	1. Any angle with measure less than ninety degrees.	1. Nayiphi na iengile enomlinganiso onganeno kwamaqondo angamashumi asithoba.
6	Addition	udibaniso; ukudibanisa	1. A mathematical operation resulting in the sum of two numbers, usually indicated by a plus (+) sign.	1. Ukubala kwemathematika (kwezibalo) okunesiphumo kudibaniso lwamanani amabini, okuboniswa ngokuqhelekileyo ngophawu lokudibanisa (+).
7	Additive	isongezo	1. Relating to addition (adjective).	1. Ngokunxulumene nodibaniso (isiphawuli)
8	Additive inverse	Isiguqulisongezo; edithivu invesi	1. The number or value obtained by change of sign: e.g. +3 and -3; +xy and -xy.	1. Inani lexabiso elifunyenwe ngokuguqula uphawu: umz. +3 no -3; +xy no -xy
9	Adjusted variance of the mean	ulungelelaniso lomahluko kumyinge	1. Variance of sample means from a finite population when sampling without replacement.	1. Ukungevani kwee-avareji zesampulu evela kwinqanaba lezinto ezinesiphelo xa kuthathwa ilunga lesampulu ngaphandle kokufaka elinye endaweni yayo.

10	Algebra	aljibhra	1. The use of symbols, usually letters, to represent numbers so that the numbers can be manipulated without stating their values.	1. Ukusebenzisa imiqondiso, ngokuqhelekileyo oonobumba, ukumela amanani ukuze amanani abenokusetyenziswa ngobuchule ngaphandle kokuxela amaxabiso awo.
11	Angle	iengile; imbombo	1. A structure comprising two rays with a common endpoint.	2. Isakhiwo esinemigca emibini enencam efanayo.
12	Approximation	uqikelelo	2. A near but not exact equality.	2. Ukulingana okuphantse kufane kodwa hayi ngqo.
13	Axis	eksisi; umgca ohamba embindini	2. A line around which a solid rotates.	2. Umgca lowo isolithi ijikeleza kuwo.
	B			
14	Bar chart	ibhatshathi	1. A diagram which consists of vertical rectangular bars. The bars are constructed to have areas that are proportional to the observed frequencies of values in the intervals on which they stand.	1. Umzobo oquka izitena (iibha) ezimi nkqo ezifana noxande. Izitena zakhiwe ukuba neendawo ezinolwalamano namaxabiso aphindaphindwayo abonwayo kwizikhewu ezimi phewu kwazo.
15	Bar graph	bhagrafu	1. A diagram which consists of vertical rectangular bars. The bars are constructed to have areas that are proportional to the observed frequencies of values in the intervals on which they stand.	1. Umzobo oquka izitena (iibha) ezimi nkqo ezifana noxande. Izitena zakhiwe ukuba neendawo ezinolwalamano namaxabiso aphindaphindiweyo abonwayo kwizikhewu ezimi phezu kwazo.
16	Base	isisekonani	1. A number or expression to be raised to a power. In the expression x^2 , x is the base and 2 is the power.	1. Inani okanye umboniso wokunyuselwa kuphindaphindo lwenani. Kumboniso we- x^2 , $u-x$ sisisekelo yaye $u-2$ kukuziphindaphinda kwenani.
17	Base	isiseko	2. The lowest or bottom side of a plane figure, or bottom face of a solid.	2. Elona cala lisezantsi okanye umphantsi wesazobe esithe tyaba, okanye ubuso bomphantsi wento eqinileyo.
18	Baseline	isiqalelo; intsusela	1. A standard used for comparison in a study or an experiment.	1. Umgangatho osetyenziswayo wokuthelekisa kuphononongo okanye kumfuniselo.
19	Bias	ukutenxa	1. Misrepresentation of structure or of measurements	1. Ukukhetha icala kwisakhiwo okanye umlinganiselo.
20	Binomial	bhayinomiyali	1. An algebraic expression with two distinct terms which may not be further simplified.	1. Umboniso we-aljebra onamabinza amabini acacileyo angenakho ukwenziwa kucalulwa ngaphazu koko.
21	Binomial	bhayinomiyali	2. A polynomial with two terms.	2. ipholinomiyali enamabinza amabini
22	Binomial approximation	uqikelelo lwebhayinomiyali	1. Use of a binomial distribution to approximate probabilities in a hypergeometric distribution.	1. Ukusebenzisa usasazo lwamagama amabini ukusondeza izinto ezinokwenzeka kusasazo lwejometri enkulu.
23	Binomial coefficient	ibhayinomiyali esisigxina	1. Any numerical factor that multiplies the successive terms in the expansion of an expression of	1. Nayiphi na ifektha yenani ephindaphinda amagama alandelelanayo ekwandiseni

			the form $(x+a)^n$, for integral n , in accordance with the binomial theorem.	imbonakalo yohlobo lwe- $(x+a)^n$, ukwenzela $u-n$ ofunekayo, ngokwethyorem yamagama amabini.
24	Binomial distribution	usasazeko lwebhayinomyali	1. A statistical distribution giving the probability of obtaining a specified number of successes in a binomial experiment.	1. Usasazo lwenkcukachamanani olunika into enokwenzeka yokufumana inani elilodwa lwamalandelelwano kumfuniselo wamabinza amabini.
25	Binomial process	inkqubo yebhayinomali	1. A sequence of observations from a binomial distribution.	1. Ulandelelwano lweziphumo zovavanyo losasazo lwamabinza-mabini.
26	Bivariate	bhayivariyethi	2. Consisting of two variables (adjective).	2. Okunezimeli-manani ezimbini (isiphawuli)
27	Box-and-whisker plot	umzobo wosasazekomanani	1. A diagram that is used to illustrate measures of location and spread of a data set against a common axis; e.g. median, quartiles and range.	1. Umzobo osetyenziswa ukubonisa imilinganiso yendawo nokusasazeka kwedata ebekwe ngokuchasene nomgca oqhelekileyo osembindini; umz., umbindi, iziqingatha noluhlu.
	C			
28	Cartesian coordinates	ulwamanisomanani ngokweCartesian	1. Pairs of numbers that uniquely identify positions of points in a Cartesian plane, usually represented by x and y for horizontal and vertical positions respectively.	1. Iperi (isibini) yamanani achonga ngokukhethekileyo iincam zeendawo kwisityaba seCartesian, ngokwesiqhelo amelwe ngu- x no- y ukwenzela iindawo ezinqamlezileyo nezimi nkqo ngokulandelelana.
29	Cartesian plane	isityaba seCartesian	1. A two-dimensional space whose points are identified by their horizontal and vertical coordinates.	1. Isithuba semilinganiso emibini eso iincam zaso zichongwa zizilungelelanisi zazo ezinqamlezayo nezimi nkqo.
30	Case	indibanisela yeenkcukacha	1. A set of all observations on variables from a single observational unit, e.g. height, weight, age and eye-colour of a particular person.	1. Isethi yazo zonke iingqwalaselo kwizinto ezitshintshayo ukusuka kwiyunithi eyodwa yokuqwalasela, umz., ubude, ubunzima, ubudala nombala wamehlo omntu othile.
31	Categorical data	iinkcukacha ezingengomanani	1. Data values or observations recorded as membership of mutually exclusive categories or classes.	1. Amaxabiso edata okanye iingqwalaselo ezirekhodwe njengobulungu beendindi okanye imigangatho ekhetheke ngokufanayo.
32	Census	ubalobantu	1. An organised process seeking to obtain qualitative or quantitative data from all members of a population. (See sample survey.)	1. Inkqubo elungiselelweyo efuna ukufumana idata yobulunga okanye yobuninzi ukuvela kuwo onke amalungu abemi. (Jonga isampulu yovavanyo).
33	Central limit theorem	sentrali-limithi thiyorem; usasazekosampuli oluqhelekileyo	1. A theorem of statistics which shows that the distribution of the sample means, though each is obtained using observations from the same arbitrary random variable, will tend to follow a normal or Gaussian distribution.	1. Ithiyorem yenkcukachamanani ebonisa ukuba usasazo lwemindilili yesampulu, nangona nganye ifunyenwe ngokusebenzisa iingqwalaselo ezivela kutshintsho olufanayo

			This approximation improves as sample size increases.	lokuzithandela olungahlelwanga, iya kuthambekela ukulandela usasazo lwesiqhelo okanye lwe-Gaussian. Olu qikelelo luyaphucuka njengoko isayizi yesampulu isanda.
34	Centre of symmetry	umbindi wolinganomacala	1. A point around which a curve is symmetrical.	1. Incam apho ukujikeleza kwegophe kunamacala alinganayo.
35	Chi-squared distribution	Chi-sikhwensi distribyushini; usasazekozinkcukacha lweChi	1. A continuous one-parameter non-symmetric distribution, used in measuring goodness of fit, in hypothesis testing and in obtaining confidence intervals for the variance of a normally distributed random variable.	1. Usasazo oluqhubekayo lobuninzi obungatshintshiyo lwamacala angalinganiyo, olusetyenziswa ukulinganisa ukulunga kokufaneleka, kwengcinga eyandulela uvavanyo kuvavanyo lwengcinga nasekufumaneni izikhewu zentembeko zokwahlukahluhana kotshintsho lokungevani kwesimeli-manani esinosasazo olikhelekileyo.
36	Chord	khodi; umgca ocanda isangqa	1. The line segment connecting two given points on a circle.	1. Ilungu lomgca odibanisa iincam ezimbini ezinikiweyo kwisangqa.
37	Circle	isangqa	1. The set of all points in a plane at a given distance (the radius) from a fixed point (the centre).	1. Isethi yazo zonke iincam kwisityaba kumgama onikiweyo (ireyidiyasi) ukusuka kwincam ezinzisiweyo (umbindi).
38	Circle interior	umphakathi wesangqa	1. The set of all points interior to a circle, with smaller distance from the centre than the radius length.	2. Isethi yazo zonke iincam zomphakathi wesangqa, nomgama omncinci ukusuka kumbindi kunobude bereyidiyasi.
39	Circumference	ubungakanani besangqa	2. The distance around a circle, the length of the perimeter.	2. Umgama ukujikeleza isangqa, ubude bomjikelezo.
40	Class	udidi	1. A group of observed numerical observations, defined by each of a convenient set of intervals covering the entire range of values.	1. Iqela lemiqwalaselo yamanani eliqwalaselweyo, elichazwa yesethi nganye encedayo yezithuba eziquka lonke uluhlu lwamaxabiso.
	D			
41	Data	iinkcukacha	1. The elements of categorical or numerical information gathered from an experiment, a survey, an observational study or routine record keeping.	1. Amalungu odidi okanye inani lolwazi oluqokelelwe kumfuniselo, uphando, uphononongo lwembonakalo okanye isiqhelo sokugcina irekhodi.
42	Data case	indibanisela yeenkcukacha	1. A set of observations on all the variables obtained from a single observational unit.	1. Isethi yeembonakalo zazo zonke izinto ezitshintshayo ezifunyenwe kwiyunithi enye yembonakalo.
43	Data matrix	isakhelo seenkcukacha	1. A rectangular array of data, one row per observational unit, and one column for each variable.	1. Uluhlu lwedata olufana noxande, olungumgca omnye ngeyunithi nganye yembonakalo, nentsika enye ngento nganye etshintshayo.
44	Data set	ingqokelela yeenkcukacha	1. A set of data, usually consisting of a common set of variables observed on each of the	1. Isethi yedata, ngokwesiqhelo equka isethi eqhelekileyo yezinto ezitshintshayo eziboniweyo

			observational units (say n units by k variables).	kwenye nenye yeeyunithi zembonakalo (masithi iiyunithi zika-n nezinto ezitshintshayo zika-k)
45	Data values	ugcino lweenkcukachamanani	1. The numerical values of observations which constitute an experiment, survey or observational study.	1. Amaxabiso amanani eembonakalo akha umfuniselo, uphando okanye uphononongo lwembonakalo.
46	Datum	iinkcukacha	1. A single element of categorical or numerical information.	1. ilungu elinye lodidi okanye inani lolwazi.
47	Decimal	idesimali	1. Using the base 10 in the representation of numbers and fractions (adjective).	1. Ukusebenzisa isisekelo se-10 ukumela amanani namaqhezu/ amaqhekeza (isiphawuli).
48	Decimal point	ichaphaza ledesimali, desimalipoyinti	1. The symbol used to separate the integer value from the non-integer value of a real number. The symbol may either be a comma or a dot.	1. Umqondiso wokwahlula ixabiso le-inteja kwixabiso lenani elingeyiyo i-inteja yenani lokwenene. Umqondiso unokuba yikoma okanye ichaphaza.
49	Degree	iqondo	1. The degree of a non-zero monomial is the sum of the exponents of the variables. The degree of a polynomial is the highest degree of any one of its monomial terms.	1. Iqondo lenani elinye elingengo-ziro sisiphumo somdibaniso wamanani okuphindaphinda atshintshayo. Iqondo lamanani amaninzi lelona qondo liphezulu lalo naliphi na lamagama alo enani elinye le-algebra.
50	Denominator	dinomineyitha	1. The number or expression at the bottom of a fraction or rational expression. The denominator of $\frac{3}{4}$ is 4.	1. Inani okanye imbonakalo engaphantsi yeqhezu okanye imbonakalo enengqondo. Idinomineyitha ka- $\frac{3}{4}$ sisi-4.
51	Dependent variable	diphendentivariyebhuli; isimelinani esixhomekekileyo	1. The variable of interest, often denoted by y, whose values are assumed partially associated with the values of some observed explanatory variables through a mathematical function.	1. Umdla otshintshayo, odla ngokuboniswa ngo-y, lowo amaxabiso awo athathwa enxulumene ngenxalenye namaxabiso ezinye izinto ezitshintshayo ezichazayo eziboniweyo ngomsebenzi wemathematika.
52	Discrete data	iinkcukacha eziqingqekileyo	1. Data whose values or observations are separate, distinct and therefore countable.	1. Idata leyo amaxabiso ayo okanye iingqwalaselo zayo zahlukeneyo, zicacile yaye ngako oko zinakho ukubalwa.
	E			
53	Elementary event	uphawu loluhlu lweziganeko	1. Any event or subset consisting of only one element from the sample space.	1. Nasiphi isiganeko okanye isetana yesethi equka ilungu elinye kuphela elivela kwisampulu yesithuba.
54	Elements	iimpawu	1. Members of a set or sample space.	1. Amalungu esethi okanye isithuba sesampulu.
55	Empty set	iseti engenazimpawu	1. The empty set is the set that contains no elements. Equivalently called the null set.	1. Isethi engenanto yisethi engaqulathanga amalungu. Ngokulinganayo ebizwa isethi etshitshisiweyo/ engenanto.
56	Equation	ikhweyizhini	1. An algebraic expression that uses an equal sign ("=") to state that two expressions have the same value.	1. imbonakalo yealgebra esebenzisa uphawu lokulingana ("=") ukuxela ukuba iimbonakalo ezimbini zinexabiso elifanayo.

57	Equilateral triangle	ekhwilatherali trayiengile; unxantathu olingana nxazonke	1. A triangle such that all three sides have the same length.	1. Unxantathu apho onke amacala enobude obufanayo.
58	Equivalent equations	ii-ikhweyizhini ezilinganayo nxazonke	1. Equations that have exactly the same set of solutions.	1. Ii-ikhweyizhini ezinesethi efana ngqo yezisombululo.
59	Error	ukusilela	1. The difference between some observed value and an estimate or approximation to a typical value associated with the observation, often expressed as an absolute or relative difference.	1. Umahluko phakathi kwexabiso elithile eliqwalaselweyo neliqikelelwayo okanye elisondezwayo kwixabiso lokwenene elinxulumene noqwalaselo, lidla ngokuboniswa njengomahluko wexabiso elipheleleyo okanye elixhomekekileyo.
60	Estimate	qikelela; thelekelela	1. An indicative or typical value of an unknown quantity, based on observed data values.	1. Ixabiso elibonisayo okanye lokwenene lobuninzi obungaziwa, ngokusekwe kwidata yamaxabiso aqwalaselweyo.
61	Estimation	uqikelelo; uthelekelelo	1. The process of using sample data to indicate the value of a parameter for a population.	1. Inkqubo yokusebenzisa isampulu yedata ukubonisa ixabiso lobuninzi obungatshintshiyo babemi.
62	Evaluate	qikelela ixabiso; misela ixabiso	1. To assign known or observed values to variables in an expression in order to find its numerical value.	1. Ukwabela amaxabiso awaziwayo okanye aqwalaselweyo kwizinto ezitshintshayo kwimbonakalo ngenjongo yokufumana inani lexabiso layo.
63	Even number	ivininamba; inani elahluleka ngesibini	1. A number that is divisible by two with zero remainder.	1. Inani elahlulwa ngesibini elinentsalela enguziro.
64	Event	iqela ngokweempawu	1. Any subset of the sample space.	1. Nayiphi isetana yesethi yesampulu yesithuba.
65	Experiment	uvavanyo; funisela	1. A study which has control and comparison of data sources, to allow for data to be observed, collected and analysed, often with a view to obtaining some evidence supporting inferences about possible cause and effect relationships.	1. Uphononongo olunolawulo nothelekiso lwemithombo yedata, ukuvumela ukuba idata iqwalaselwe, iqokelelwe yaye ihlutywe, ngamaxesha amaninzi ngenjongo yokufumana ubungqina obuthile obuxhasa iintlekelelo malunga nembali nesiphumo esinokubakhona sonxulumano. (umfuniselo oziphumo zawo zingaqinisekanga)
	F			
66	Factor	Ifektha; inani elingenayo kwelinye	1. A value or expression that exactly divides another expression. "2 is a factor of 4" means that 2 divides 4.	1. Ixabiso okanye imbonakalo ehlula ngqo enye imbonakalo. "U-2 yifektha ka-4" kuthetha ukuba u-2 wahlula u-4.
67	Factoring	ucwangcisomanani angenayo kwamanye	1. The act of obtaining factors of a value or expression.	1. Umsebenzi wokufumana iifektha zexabiso okanye imbonakalo.
68	Finite	-neempawu eziqingqekileyo	1. Having a number of elements which can be put in one-to-one correspondence with a terminating set of the natural numbers.	1. Ukuba nenani lamalungu anokubekwa kukungqinelana kwelungu nelineye enesethi enesiphelo yamanani endalo.

72	First-degree equation	i-ikhweyizhini yeqondo lokuqala	1. An equation that can be written in the form $Ax + By = C$; i.e. a polynomial equation of degree 1.	1. I-ikhweyizhini enokubhalwa ngendlela ethi- $Ax + By = C$; oko kukuthi., i-ikhweyizhini yamagama amaninzi ealjibra aweqondo loku-1.
73	Five-number summary	ushwankathelo zinkcukach a oluneengongoma ezintlanu	1. A five-number summary consists of a sample minimum, lower quartile, median, upper quartile and sample maximum.	1. Isishwankathelo samanani amahlanu siqulathe obona buncinane besampulu, isine esisezantsi, umbindi, isine esiphezu nobona bukhulu besampulu.
74	Formula	fomyula	1. A formal mathematical expression of rule or principle.	1. Imbonakalo okanye umthetho-siseko osesikweni wemathematika.
75	Formulae	iifomyula	1. Plural of formula.	1. Isininzi sefomula.
76	Frequency	uphindaphindozihlundo	1. The number of occurrences of an event. See Absolute frequency, Relative frequency.	1. Inani lwezenzeko zesiganeko. Jonga ukuphindaphindeka okupheleleyo, ukuphindaphindeka okuxhomekekileyo.
77	Function	ifankshini	1. A correspondence between two sets such that each element of the first set (the domain) is assigned to exactly one element of the second set (the range).	1. Ukungqinelana phakathi kweesethi apho ilungu ngalinye lweesethi yokuqala (ummandla) lisabelwa kwilungu elinye ngqo kwisethi yesibini (uluhlu).
	G			
78	Geometric distribution	usasazekomathuba empumelelo	1. The discrete probability distribution for the number of experiments required to achieve the first success in a sequence of independent repetitions of a binary experiment, each with the same probability of success.	1. Usasazo olulodwa olunokwenzeka lenani lemifuniselo efunwayo ukufikelela impumelelo yokuqala kulandelelwano lweziphindaphindo ezizimeleyo lomfuniselo wamanani amabini, ngamnye unempumelelo efanayo enokwenzeka.
79	Geometric progression	ulandelelwano manani ngokwejiyometri	1. A sequence of numbers whose successive elements differ by a constant multiplier.	1. Ulandelelwano lwamanani lawo ukulandelelana kwamalungu kwahluka ngesiphindaphindi esingaguqukiyo.
80	Graph	igrafu	1. The graph of a function is the set of all points whose coordinates correspond to the function; i.e. the graph of the function $f(x)$ is the set of all points of the form $(x, f(x))$, where x is an element of the domain of f .	1. Igrafu yomsebenzi yisethi yazo zonke iincam ezo izilungelelanisi zazo zingqinelana nomsebenzi; oko kukuthi, igrafu yomsebenzi engu- $f(x)$ yesethi yazo zonke iincam zohlobo olungu- $(x, f(x))$, apho $u-x$ elilungu lommandla ka- f .
81	Growth curve	igophe elisisibonisikhula	1. The curve of a measured characteristic, such as population size, whose values are plotted on a graph as a function of time. See Exponential growth curve, Logistic growth curve.	1. Uphawu lwegophe elilinganisiweyo, elifana nesayizi yabemi, leyo amaxabiso ayo ayilwe kwigrafu njengomsebenzi wexesha. Jonga igophe lokukhula kwenani lokuziphindaphinda, negophe lokukhula kolungiselelo ngobuchule/ ngengqiqo.
	H			

82	Hexagon	heksagoni; unxantandathu	1. A six-sided polygon.	1. Unxaninzi onamacala amathandathu.
83	Histogram	histogram; igrafu yeenkcukachamanani	1. A diagram representing the frequency distribution of continuous data grouped by means of class intervals. See also Bar graph or Bar chart.	1. Umzobo omele usasazo lokuphindaphinda kwedata eqhubekayo ebekwe ngokwamaqela ngendlela yezithuba zodidi. Jonga kananjalo igrafu yezitena okanye ibha-tshathi.
84	Horizontal line	umgca okhwezayo	1. A line of the form $y = b$; i.e. a line with slope 0.	1. Umgca wohlobo lwe- $y = b$; oko kukuthi umgca onethambeka u-0.
85	Hypergeometric distribution	usasazeko oluqingekileyo	1. A discrete probability distribution for the number of successes in a sample drawn without replacement from a finite population.	1. Usasazo olulodwa lokunokwenzeka lwenani lweempumelelo kwisampulu etsalwe ngaphandle kokubuyisela enye endaweni yayo ukuphuma kubemi abanesiphelo.
86	Hypotenuse	hayiphothenasi; icala elide lonxantathu	1. The longest side of a right-angled triangle, namely the side opposite the right angle.	1. Elona cala lide lonxanthathu othe nkqo/olidolo, oko kukuthi icala elichasene ne-engile elidolo/ethe nkqo.
87	Hypothesis	ingcinga engakafezekiswa; ingcinga engakaphuhli	1. A statement of belief which is intended for testing against incoming sample information.	1. Inkcazo yenkolo enenjongo yokuvavanya ngokuchasene nesampulu yolwazi olungenayo.
88	Hypothesis test	uvavanyongcinga engakafezekiswa; uvavanyongcinga engakaphuhli	1. An instance of hypothesis testing.	1. Imeko yokuvavanya ingcinga ethathwa njengenyani.
89	Hypothesis testing	ukuvavanya ingcinga engakafezekiswa; ukuvavanya ingcinga engakaphuhli	1. A method of making statistical decisions using data of a random sample to accept a specified hypothesis, called the null hypothesis, or to reject it and to prefer an alternative hypothesis.	1. Indlela yokwenza izigqibo zenkcukacha-manani kusetyenziswa idata yesampulu enganamkhethe ukwamkela ingcinga ethathwa njengenyani echaziweyo, ebizwa ingcinga ethatha njengenyani engenanto/ etshitshisiweyo, okanye ukuyilandula nokukhetha enye ingcinga ethathwa njengenyani.
	I			
90	Identity	ayidentithi; - ngathandabuzeki	1. An equation that is always true. Example: $2 \times 0 = 0$.	1. Isethi yamanani angu-bi, apho u-b elinani lokwenene yaye u-i ebonisa isikweruthi sika- -1.
91	Imaginary number	inani elisengqondweni	1. The set of numbers bi , where b is a real number and i denotes the square root of -1.	1. I-ikhweyizhini eyinyani ngamaxesha onke. Umzekelo: $2 \times 0 = 0$
92	Improper fraction	ifrekshini enentloko enkulu	1. A fraction whose numerator has a greater value than its denominator.	1. Isethi yamanani angu-bi, apho u-b elinani lokwenene yaye u-i ebonisa isikweruthi sika- -1.
93	Inconsistent	-ngangqinelaniyo	1. An equation or system of equations with no solution, because at least one of the equations contradicts the remaining equations.	1. Iqhezu elo inyumereyitha yalo inexabiso elikhulu kunelo ledenomineyitha yalo.

94	Independence	-ngaxhomekeki; -zimelayo	1. An absence of probability connections between events and/or variables.	1. I-ikhweyizhini okanye inkqubo yee-ikhweyizhini ezingenaso isisombululo, ngenxa yokuba ubuncinane enye yee-ikhweyizhini iphikisana nee-ikhweyizhini ezishiyekileyo.
95	Independent	okungangquzulaniyo; okuzimeleyo	1. In Mathematics, a set of statements, propositions, formulae or terms whose truth or values do not constrain one another in any way.	1. Ukungabikho kwemidibaniso enokwenzeka phakathi kweziganeko kunye/ okanye izinto ezitshintshayo.
96	Independent	-zimeleyo	2. In Statistics, having no probability connections.	1. KwiMathematika, isethi yeenkcazo, izindululo, iifomula okanye amagama ezo inyani okanye amaxabiso azo enganyanzeli enye kwenye nangayiphi indlela.
97	Independent events	iziganeko ezizimeleyo; izehlo ezizimeleyo	1. Events A and B with the property that $\Pr(A \text{ and } B) = \Pr(A) \cdot \Pr(B)$. Equivalently $\Pr(A B) = \Pr(A)$.	2. Kwiinkcukacha-manani, ukungabikho kwemidibaniso enokwenzeka.
98	Independent variables	indiphendentivariyebhuli; izinto ezitshintshayo ezizimeleyo	1. In Statistics, a set of variables for which joint probability distributions are obtained by products of probability mass functions or probability density functions.	1. Iziganeko u-A no-B ezinophawu lokuba u- $\Pr(A \text{ and } B) = \Pr(A) \cdot \Pr(B)$. Ngokulinganayo u- $\Pr(A B) = \Pr(A)$.
99	Independent variables	ii-indiphendentivariyebhuli; izinto ezitshintshayo ezizimeleyo	2. Explanatory or predictor variables in a model for a response or dependent variable.	1. Kwiinkcukacha-manani, isethi yezinto ezitshintshayo ezo umdibaniso wezinto ezinokwenzeka zifunyanwa ngeemveliso zemisebenzi yobunzima obunokwenzeka okanye imisebenzi yobunzulu obunokwenzeka.
100	Inequality	ulinganiso; ukungalingani.	1. An algebraic expression that uses one of the four relations "greater than", "less than", "greater than or equal to" or "less than or equal to" to state a connection between the values of two expressions. The solutions of inequalities are intervals.	2. Izinto ezitshintshayo ezichazayo okanye ezixela kwangaphambili kumzekelo wokusabela okanye into etshintshayo exhomekekileyo.
101	Joint variation	ukudibana kwezinto ezitshintshayo	1. The possible tendency of contrasts between values of one or more variables to be associated with contrasts in other variables.	1. Ukuthambekela okunokubakhona bezichasi phakathi kwamaxabiso ezinto ezitshintshayo enye okanye ngaphezulu zokuba ziyamaniswe nezichasi kwezinye izinto ezingatshintshiyo.
	K			
	L			
102	Least common multiple	esona siphindwa sincinane	1. The smallest number or simplest expression that is divisible by two or more given numbers or expressions.	1. Elona nani lincinci okanye eyona mbonakalo ilula eyahluleka ngesibini okanye

				amanani okanye iimbonakalo ezingaphezulu ezinikiweyo.
103	Least squares	ulungelelwaniso lweenkcukacha	1. A criterion which is generally used to fit a specified model to observed data. The criterion minimises the sum of all squared differences between observed and corresponding fitted values based on the model.	1. Inqobo yokulinganisa esetyenziswa ngokubanzi ukulungela umzekelo ochaziweyo wokuqwalasela idata. Inqobo yokulinganisa inciphisa isiphumo sokudibanisa sayo yonke iimahluko phakathi kwamaxabiso aqwalaselweyo nangqinelanayo alungileyo ngokusekwe kumzekelo.
104	Legs	imilenze	1. The two sides of a right-angled triangle that form the right angle.	1. Amacala amabini onxantathu olidolo abumba iengile elidolo/ethe nkqo.
105	Like terms	izalathisi ezifanayo	1. Terms in an expression that have identical variables and powers. In the expression $5x^2 - 3x^2 + 2x$, the first two terms are like terms, and they can be added to yield $2x^2$.	1. Amagama kwimbonakalo anezinto ezitshintshayo ezifanayo namanani aphindaphindwayo. Kwimbonakalo $5x^2 - 3x^2 + 2x$, amagama amabini okuqala ngamagama afanayo, yaye anokudityaniswa ukunika isiphumo u- $2x^2$.
106	Linear equation	i-ikhweyizhini yolandelelwano	1. An equation that can be written in the form $Ax + By = C$.	1. I-ikhweyizhini enokubhalwa ngendlela ethi- $Ax + By = C$.
107	Linear equation	i-ikhweyizhini yolandelelwano	2. An equation with all variables having power equal to one: $Ax + By + Cz + Dw = E$.	2. I-ikhweyizhini enazo zonke izimeli-manani ezinenani eliphindaphindayo elilingana nesinye: $Ax + By + Cz + Dw = E$.
108	Linear function	liniyefankshini; ifankshini yolandelelwano	1. A function whose graph is a line and can be written in the form $f(x) = mx + b$.	1. Ifankshini leyo igrafu yayo ingumgca yaye inokubhalwa ngendlela engu- $f(x) = mx + b$.
109	Linear function	liniyefankshini; ifankshini yolandelelwano	2. A function of several variables all with power equal to one: $f(x,y,z,w) = Ax + By + Cz + Dw$.	2. Ifankshini yezimeli-manani eziliqela zonke ezinenani eliphindaphindayo elilingana nesinye: $f(x,y,z,w) = Ax + By + Cz + Dw$.
110	Linear regression	ukuhlehla kolandelelwano; ukubuya umva kolandelelwano	1. A statistical method which estimates a linear relationship between a dependent variable and one or more explanatory variables.	1. Indlela yenkcukacha-manani eqikelela unxulumano lomgca phakathi kwento etshintshayo exhomekekileyo nezinto ezitshintshayo ezichazayo enye okanye ezingaphezulu.
111	Literal equation	litherali ikhweyizhini; i-ikhweyizhini empawuninzi	1. An equation that contains numbers, constants and at least two variables.	1. I-ikhweyizhini equlethe amanani, izimeli-manani ezingatshintshiyo kunye ubuncinane nezimeli-manani ezimbini.
112	Logistic curve	lojistikhikhevu	1. A graph with an increasing S-curve, obtained from the logistic function $f(x) = \exp(x)/[1+\exp(x)]$. The curve initially has exponential growth, followed by a slow growth and finally growth virtually stops. Note that $f(x) + f(-x) = 1$.	1. Igrafu enegophe elingu-S elikhulayo, elifunyanwa kwifankshini yolungiselelo lobuchule $f(x) = \exp(x)/[1+\exp(x)]$. Igophe ekuqaleni linokukhula kwenani elandisayo, lilandelwa kukukhula

				okucothayo yaye ekugqibeleni ukukhula kuyamisa ngenyani. Qaphela ukuba $u - f(x) + f(-x) = 1$.
113	Logistic growth curve	lojistikhi growuthikhevu	1. A graph of size against age, that has a similar shape to the logistic function: $f(t) = k \cdot \exp[(t-a)/b] / \{1 + \exp[(t-a)/b]\}$.	1. Igrafu yesayizi echasene nobudala, enesimo esifanayo nefankshini yolungiselelo lobuchule: $f(t) = k \cdot \exp[(t-a)/b] / \{1 + \exp[(t-a)/b]\}$.
114	Lower quartile	ikhwathayili esezantsi	1. A value which exceeds 25% of all data values, and is less than the remaining 75% of data values. Within an ordered data set of n data values, the lower quartile occupies a rank n/4 from the minimum rank.	1. Ixabiso eligqitha ama-25% lawo onke amaxabiso edata, yaye linganeno kwamaxabiso edata angama-75% ashiyekileyo. Phakathi kwesethi yedata ehleliweyo yamaxabiso edata angu-n, isine esiphantsi sithatha udidi lwe-n/4 ukusuka kwelona didi luncinci.
115	Lowest terms	ezona zalathisi zisezantsi	1. An expression that is written in its simplest or most reduced form. A fraction is in lowest terms when the numerator and denominator have no common natural number factors except 1.	1. Imbonakalo ebhalwe ngeyona ndlela icacileyo okanye eyona incitshisiweyo. Iqhezu likuwona magama aphantsi xa inyumereyitha nedinominayitha zingenazo iifektha zenani lendalo eliqhelekileyo ngaphandle kwesi-1.
	M			
116	Mathematical model	umfuziselo wemathematika	1. A collection of functions or expressions used to predict behaviours and approximate values of quantities in the world.	1. Inggokelelo yemisebenzi okanye iimbonakalo ezisetyenziswa ukuxela kwangaphambili izimilo kunye namaxabiso asondeziweyo obuninzi ehlabathini.
117	Matrix	isakhelo	1. A rectangular array of elements displayed in rows and columns and enclosed in square brackets. Matrices facilitate the solution of mathematical operations such as the transformation of coordinates.	1. Uluhlu olufana noxande lwamalungu aboniswe ngemikrozo neentsika nezivalelwe kwizibiyeli ezizikwere. Izakhelo zilungiselela isisombululo sokubala semathematika ezifana nenguqu yezilungelani.
118	Matrix algebra	isakhelo sealjibhra	1. A branch of algebra which studies matrices (a plural for matrix).	1. Isebe lealjibra eliphononongo izakhelo (isininzi sesakhelo).
119	Mean	umyinge	1. The arithmetic mean. The mean is the average of a set of numbers or quantities, calculated by dividing their sum by the number of terms.	1. Umndilili wezibalo. Umndilili yivavereji yesethi yamanani okanye izinto ezininzi, ebalwa ngokwahlula isiphumo sazo sokudibanisa ngenani lamagama.
120	Mean diameter	umyinge wedayamitha	1. Average diameter.	1. Iavereji yedayamitha.
121	Mean mass	umyinge wobunzima	1. Average mass.	1. Iavereji yobunzima.
122	Measure	umlinganiselo	1. A system of units.	1. Inkqubo yeeyunithi.
123	Measure	linganisela	2. To describe an object in terms of a number of standard units (verb).	2. Ukuchaza into ngokwenani leeyunithi ezisemgangathweni (isenzi).
124	Median	umbindi	1. The middle value in a set of ranked and ordered data values. The value at which the cumulative	1. Ixabiso eliphakathi kwisethi yamaxabiso edata abekwe ngeendidi

			frequency reaches or exceeds 1/2 or 50%.	nahleliweyo. Ixabiso apho ukwenzeka rhoqo okongezelelekayo kufikelela okanye kugqitha isi-1/2 okanye ama-50%.
125	Median	umbindi wosasazeko	2. The middle value of a frequency distribution of a variable. The value at which the cumulative probability reaches or exceeds 1/2 or 50%.	2. Ixabiso eliphakathi losasazeko lokwenzeka rhoqo kwento etshintshayo. Ixabiso apho ukongezeleleka okunokwenzeka kufikelela okanye kugqitha isi-1/2 okanye ama-50%.
126	Mixed number	inani elingumxube	1. A number which expresses a value as the sum of an integer and a fraction; $3\frac{3}{4}$ is a mixed number.	1. Inani elibonakalisa ixabiso njengesiphumo sokudibanisa i-inteja neqhezu; u- $3\frac{3}{4}$ linani elingumxube.
127	Monomial	monomiyali	1. An algebraic expression consisting of a single term of a polynomial; monomials are constants or the products of a constant and one or more variables raised to whole-number powers.	1. Imbonakalo yealjibra equelethe igama elinye lamagama amaninzi ealjibra; amagama anagama elinye lealjibra zizinto ezingatshintshiyo okanye iziphindaphindo zento engatshintshiyo kwakunye nezinto ezitshintshayo enye okanye ezingaphezulu eziphakanyiswe ukuba ngamanani apheleleyo ngophindaphindo lwamanani.
128	Multinomial	malthinomiyali	1. An algebraic expression with more than one term. The binomial is a special case.	1. Imbonakalo yealjibra enegama egama elingaphezulu kwelinye. algebraic expression with more than one term. Amagama amabini ealjibra yimeko ekhethekileyo.
	N			
129	Natural logarithm	ilogarithim enesiseko	1. A logarithm with base e, usually written "ln".	1. ilogaridhimu enesiseko esingu-e, edla ngokubhalwa ngo-"ln".
130	Natural numbers	amanani aqhelekileyo	1. The set {1, 2, 3, ...} of all positive whole numbers, also called the Counting numbers.	1. Isethi {1, 2, 3, ...} yawo onke amanani aqhubekayo apheleleyo, abizwa kananjalo Amanani okuBala.
131	Normal approximation	uqikelelo oluqhelekileyo	1. Approximating a distribution (such as a binomial, Poisson or hypergeometric distribution) using a normal distribution.	1. Ukusondeza usasazo (olufana namagama amabini ealjibra, i-Poisson okanye usasazo olugqithisileyo lwejometri) kusetyenziswa usasazo oluqhelekileyo.
132	Normal distribution	usasazeko oluqhelekileyo	1. A distribution that is continuous, bell-shaped and symmetrical with a particular functional form. The mean, median and mode are coincident.	1. Usasazo oluqhubekayo olwakheke njengentsimbi olunamacala alinganayo nohlobo oluthile lokusebenza. I-avereji, umbindi nemo ziziganeko ezenzeka ngaxeshanye.
133	Normal equation	i-ikhweyizhini eqhelekileyo	1. An alternative name for equations using the least squares criterion to find the parameters for a linear model.	1. Elinye igama lee-ikhweyizhini ezisebenzisa ubuncinane inqobo yokulinganisa yezikwere ukufumana ubuninzi

				obungatshintshiyo bomzekelo womgca.
134	Normal curve	igophe eliqhelekileyo	1. A symmetrical bell-shaped curve which represents the probability density function of a normal distribution.	1. Igophe elakheke njengentsimbi elinamacala alinganayo elimele umsebenzi wobunzulu obunokwenzeka bosasazo oluqhelekileyo.
135	Notation	izimelimanani; inoteyishini	1. A system of symbols used to represent mathematical objects and statements.	1. Inkqubo yeempawu ezisetyenziswa ukumela izinto neenkcazo zemathematika.
136	Null set	isethi engenanto	1. The set that contains no elements (empty set).	1. Isethi engaqulathanga amalungu. (isethi engenanto)
137	Null hypothesis	ingcinga engekafezekiswa engenanto	1. A reference hypothesis that may either be accepted or rejected in hypothesis testing.	1. Ingcinga ethathwa njengenyani yokubhekisa enokwamkelwa okanye ukulahlwa kuvavanyo lwengcinga ethathwa njengenyani.
138	Numerator	inyumareyitha	1. The number or expression in the upper part of a fraction. The numerator of $\frac{3}{4}$ is 3.	1. Inani okanye imbonakalo kwinxalenye engentla yeqhezu. Inyumareyitha ka- $\frac{3}{4}$ sisi-3.
139	Numerical coefficient	inani lophindaphindo olusisigxina	1. A constant that multiplies a term. In the expression $5x^2$, 5 is the numerical coefficient of x^2 .	1. Into engaguqukiyo ephindaphinda igama. Kwimbonakalo engu- $5x^2$, u-5 linani elandisayo lika- x^2 .
140	Numerical value	ixabiso kwinani	1. The number obtained for an expression when numbers are substituted for all variables.	1. Inani elifunyenweyo lwembonakalo xa amanani ethathelwa indawo zizo zonke izinto ezitshintshayo.
	O			
141	Obtuse angle	obtusiengile	1. Any angle with measure greater than 90 degrees.	1. Nayiphi i-engile enomlinganiso ongaphezulu kwamaqondo angama-90.
142	Observations	-qwalaselweyo; -qatshelweyo	1. Particular values taken by random variables.	1. Amaxabiso athile athathwe yizimeli-manani ezingenamkhethe.
143	Observed frequencies	uphindaphindo oluqwalaselweyo; uphindaphindo oluqatshelweyo	1. The actual counts of data values belonging to each cell of a table or a contingency table. See Absolute frequency.	1. Izibalo ngqo zamaxabiso edata ezeseli nganye kuludwe okanye uludwe lwento enokwenzeka. Jonga uphindaphindo olupheleleyo.
144	Observed number	inani eliqwalaselweyo; inani eliqatshelweyo.	1. The recorded number of occurrences or outcomes of an experiment.	1. Inani elirekhodiweyo lezehlo okanye iziphumo zomfuniselo.
145	Observed range	umgama oqwalaselweyo, umgama oqatshelweyo	1. The range of the observed values of a variable.	1. Uluhlu lwamaxabiso aqwalaselweyo kwisimeli-manani.
146	Observed value	ixabiso eliqwalaselweyo; ixabiso eliqatshelweyo	1. An actual value obtained from a random variable.	1. Ixabiso ngqo elifunyenweyo kwisimeli-manani esingenamkhethe.
147	Odd number	inani elingumnqakathi	1. An integer which is not divisible by 2.	1. I-inteja engenakwahlulwa ngo-2.
148	One-sided alternative	imbono ecalanye	1. Values associated with rejecting the null hypothesis, defined by a single inequality. See Two-sided alternative.	1. Amaxabiso ayamaniswa nokulahla ingcinga ethathwa njengenyani etshitshisiweyo, echazwa ngokungalingani okunye.
149	One-to-one function	Inani elimsebenzi ikukukhupha isiphumo	1. A function $f(x)$ such that for each value y of the range, there is	1. Umsebenzi we- $f(x)$ njengoko kwixabiso ngalinye loluhlu u-y, akukho xabiso

		esinye; uphawu olungucalanye	one unique value x of the domain that corresponds to y .	lilodwa elingu- x lommandla ongqinelana no- y .
150	Ordered pair	isibini esihleliweyo	1. A set of two numbers (x, y) , often as represented by a point on the coordinate plane.	1. Isethi yamanani amabini $u-(x, y)$ idla ngokuboniswa ngencam kwisityaba sesilungelelanisi.
151	Ordinate	isilungelelanisi	1. The y -coordinate, or second coordinate, of an ordered pair.	1. I-coordinate engu- y , okanye i-coordinate yesibini yeperi ehleliweyo.
152	Origin	isiqalo	1. The point $(0, 0)$ that corresponds to the intersection of the x -axis and y -axis.	1. Incam $u-(0, 0)$ engqinelana nokunqamlezana kwe-eksis $u-x$ ne-eksis $u-y$.
153	Outcome	isiphumo	1. The result of an experiment or a situation of uncertainty.	1. Isiphumo somfuniselo okanye imeko yokungaqiniseki.
154	Outlying values	amanani ahluké gqathu kwamanye	1. Values which are far removed from other values in a set of data, either by being unusually small or large. See Outlier.	1. Amaxabiso asuke kanobom kwamanye amaxabiso kwisethi yedata, mhlawumbe ngokubamancinci okanye makhulu ngokungaqhelekanga. Jonga ukuba kude nombindi.
155	Outlier	awuthilaya; inani elahluke lodwa kwamanye	1. An observation value which is far from other values in a set of data.	1. Ixabiso lokuqwalasela elikude namanye amaxabiso kwisethi yedata.
156	Outlier	awuthilaya; inani elahluke lodwa kwamanye	2. A value in one of the narrow tails of a probability distribution.	2. Ixabiso kwelinye lemisila ecuthekileyo yosasazo lento enokwenzeka.
	P			
157	Parabola	pharabhola (igophe elingu- U kwigrafu)	1. The graph of a quadratic equation.	1. Igrafu ye-ikhweyizhini yexande/ isikwere.
158	Parallel lines	imigca enxuseneyo	1. Two lines with the same slope; i.e. if two parallel lines intersect, they are the same line.	1. Imigca emibini enethambeka elifanayo;oko kukuthi ukuba imingca enxuseneyo iyanqamleza, ngumgca ofanayo.
159	Parallelogram	pharalelogram	1. A four-sided figure with opposite pairs of sides parallel.	1. Isazobe esinamacala amane neeperi ezichaseneyo zamacala anxuseneyo.
160	Parameter	pharamitha	1. A value that partially characterises a specified population, usually unknown or estimated from data.	1. Ixabiso elifanekisa inxalenye yabemi abachaziweyo, ngokuqhelekileyo ngokungaziwa okanye ukuqikelelwa kwidata.
161	Peak	incopho	1. The highest point of a graph.	1. Eyona ncam iphezulu yigrafu.
162	Pentagon	phentagoni; unxantlanu	1. A five-sided polygon.	1. Ipholigoni enamacala amahlanu.
163	Percent	pesenti	1. Parts per hundred.	1. Iinxalenye ngekhulu.
164	Percentage	pesenteji	1. The proportion or part of a whole expressed with a denominator of 100.	1. Ulwalamano okanye inxalenye yento epheleleyo ebonakaliswa ngedinomineyitha eli-100.
165	Percentile	pesentayili	1. A value of a random variable that marks the location of an integral percentage of the cumulative distribution.	1. Ixabiso lesimeli-manani esingenamkhethe esiphawula indawo yepesenteji efunekayo yosasazo olongezelelekayo.

166	Perfect square	isikwere esifezekileyo	1. A number that is the square of a positive integer. The numbers 4, 9, and 16 are perfect squares.	1. Inani elisisikwere se-inteja eqhubekayo. Amanani isi-4, 9, ne-16 zizikwere ezifezekileyo.
167	Permutation	phemyuteyishini; inguqulo kudweliso	1. An ordered arrangement of a specified number of objects.	1. Ucwangciso oluhlelekileyo lwenani lezinto ezichaziweyo.
168	Perpendicular lines	imigca ephephendityhula	1. Two lines that intersect at a right angle.	1. Imigca emibini eyenze iengile engu 90°.
169	Pie chart	igrafu esisangqa; phayitshathi	1. A circular diagram with sectors whose areas are proportional to the frequencies of categories in a data set.	1. Umzobo osisazinge onamacandelo lawo imimandla yawo ilulwalamano lobuninzi bophindaphindo lweendidi kwisethi yedata.
	Q			
170	Quadrant	khwadranti	1. One of four regions separated by the x- and y-axes of a rectangular coordinate system.	1. Omnye wemimandla emine eyahlulwe ngee-asi u-x no-y zenkqubo yezilungelani ezifana noxande.
171	Quadrat	khwadrathi	1. A unit of area defined to partition a plane surface into parts of equal extent.	1. Iyunithi ye-eriya eyenziwe ukwahlula umphezulu wesityaba ukuba ziinxenye zobukhulu obulinganayo.
172	Quadratic equation	khwadrathikhi ikhweyizhini	1. A polynomial equation of the second degree: e.g. $ax^2 + bx + c = 0$, where a is not zero.	1. I-ikhweyizhini yamagama amaninzi e-algebra yeqondo lesibini: umz., $ax^2 + bx + c = 0$, apho u-a is engenyuye uziro.
173	Quadrilateral	khwadrilatherali	1. A four-sided polygon.	1. Ipholigoni enamacala amane.
174	Qualitative variable	iinkcukacha ezingengomanani	1. A categorical variable, in contrast to a numerical variable.	1. Into etshintshayo ngokupheleleyo, ngokuchasene nento etshintshayo yamanani.
175	Quantitative data	iinkcukacha ezingamanani	1. Data derived from counts or measures.	1. Idata evela kwizibalo okanye imilinganiso.
176	Quantity	ubungakanani	1. Number or amount or extent.	1. Inani okanye ubungakanani okanye ubukhulu.
177	Quartile	khwathayili	1. Any of the three values which divide a ranked and ordered data set into four equal parts.	1. Naliphi lamaxabiso amathathu ahlula isethi yedata ebekwe ngodidi nohlelo kwiinxenye ezine ezilinganayo.
178	Quota sampling	ucaphulo lwesampuli	1. A method of non-random sampling, widely used in opinion polling or market research, which targets specified numbers of subjects with particular characteristics.	1. Indlela yokuthatha isampulu engeyiyo engenamkhethe, esetyenziswa ngokubanzi kuvoto lwezimvo okanye uphando lwentengiso, olujolisa kumanani achaziweyo abantu abaneempawu ezithile.
179	Quotient	isiphumo solwahlulo; khowushiye	1. The result of the division of one number or expression by another.	1. Isiphumo sokwahlula inani elinye okanye imbonakalo ngelinye.
	R			
180	Radical	radikhali; ingcambu	1. A root.	1. Ingcambu.

181	Radical expression	radikhaliekspreshini	1. An expression containing one or more radicals.	1. Imbonakalo equlethe iimpawu zengcambu enye okanye ngaphezulu.
182	Radical sign	uphawu lweradikhali; uphawu lwengcambu	1. The symbol used to denote a root or the operation of taking a root.	1. Uphawu olusetyenziswa ukubonisa ingcambu okanye ubalo lokuthatha ingcambu.
183	Radicand	radikhendi	1. The number or quantity from which a root is to be extracted. The radicand is usually preceded by a root sign.	1. Inani okanye ubuninzi okukhutshwa kubo ingcambu. I-radican idla ngokwandulelwa luphawu lwengcambu.
184	Radius	reyidiyasi; umakhasangqa	1. The common distance from any point on the circumference of a circle to the centre.	1. Umgama oqhelekileyo ukusuka nakweyiphi incam kwisazinge sesangqa ukuya embindini.
185	Ratio	umlinganiselo; reyishiyo	1. The quotient of two values or expressions of like units.	1. Isiphumo solwahlulohlulo samxabiso okanye iimbonakalo ezimbini zeeyuniti ezifanayo.
186	Rational numbers	amanani ereyishiyo	1. The set of numbers that can be expressed as a ratio p/q where p and q are integers and q is not equal to zero. Irrational: $\pi = 3.1415289.....$ $\sqrt{2} = 1.41.....$	1. Isethi yamanani anokubonakaliswa njengokwalamana kuka- p/q apho $u-p$ no- q izii-inteja yaye $u-q$ akalingani nozero.
187	Rationalise	Rashinalayiza; guzula idinomeyitha	1. To simplify a radical expression in order to remove the radical sign, but without changing its value.	1. Ekwenzeni lula imbonakalo enophawu lwengcambu ngenjongo yokususa uphawu lwengcambu, kodwa ngaphandle kokutshintsha ixabiso layo.
188	Ray	reyi; umgca olutolo	A portion of a line having one endpoint and then going off to infinity.	1. Inxalenye yomgca enencam enye yesiphelo ze iqhubekwe ngokungenasiphelo.
189	Reading	uphicotho	1. The precise figure observed on a measurement instrument.	1. Isazobe ngqo esiqwalaselwe kwisixhobo somlinganiselo.
190	Real numbers	amanani apheleleyo; amanani obalo	1. The set of all positive and negative integers, rationals and irrationals.	1. Isethi yazo zonke ii-inteja eziqhubekayo nezirhoxayo, ezinengqiqo nezingenayo ingqiqo.
191	Reciprocal	utshintshiselwanomanani; resiprokhali	1. The result of interchanging the numerator and the denominator of a fraction. The reciprocal of any number a is $1/a$. See Inverse.	1. Isiphumo sokutshintshiselana kwenyumereyitha nedinomeyitha yeqhezu. Ukufana macala kwalo naliphi inani $u-a$ ngu- $1/a$. Jonga uMguqulelwa.
192	Reduced form	unciphisomo	1. A fraction in lowest terms; i.e. such that the numerator and denominator share no common factor.	1. Iqhezu ngezona ndlela ziphantsi; oko kukuthi njengoko inyumereyitha nedinomeyitha zingabelani ngefektha efanayo.
193	Regression	irigreshini	1. A relationship between a dependent variable and one or more independent or explanatory variables.	1. Unxulumano phakathi kwento etshintshayo exhomekekileyo kunye nezinto ezitshintshayo enye okanye ngaphezulu ezizimeleyo okanye ezichazayo.

194	Regression model	imodeli yerigreshini	1. A mathematical expression describing how explanatory variables affect a response variable.	1. Imbonakalo yemathematika echaza ukuba izinto ezitshintshayo ezichazayo zikuchaphazela njani ukusabela kwento etshintshayo.
195	Rejection region	irijekshinrijini	1. The set of values of a hypothesis test statistic for which the null hypothesis is rejected.	1. Isethi yamaxabiso yovavanyo lwenkcukachamanani lwengcinga ethathwa njengenyanani oluya kulahla ingcinga ethathwa njengenyanani etshitshisiweyo.
196	Relation	unxulumano; ubudlelane	1. A set of ordered pairs (x, y), which often denotes a relationship between x and y. For instance, the relation $x=y$ denotes the set of all ordered pairs of the form (x, x).	1. Isethi yezibini ezihleliweyo u-(x, y), ezidla ngokubonisa unxulumano phakathi kuka-x no-y. Ukwenza umzekelo, unxulumano lokuthi $x=y$ lubonisa isetho yazo zonke izibini ezihleliweyo zohlobo luka-(x, x).
197	Relative frequency	izihlandlo zonxulumano	1. The ratio of the number of successes to the total number in a sample.	1. Ulwalamano lwenani lweempumelelo ukuya kwinani lilonke kwisampulu.
198	Representative	umelo	1. The ratio of the number of successes to the total number in a sample.	1. Ulwalamano lwenani lweempumelelo ukuya kwinani lilonke kwisampulu.
199	Representative sample	isampulu yomelo	1. Assuming the value or values of a particular set or population.	1. Ukuthatha njengenyanani ixabiso okanye amaxabiso kwisethi ethile okanye abemi.
	S			
200	Sample	isampulu; isivandlakanyi	1. A subset of a population selected in order to make inferences about the entire population.	1. Isetana yesethi yabemi abakhethiweyo ukuze kwenziwe iintelekelelo malunga nabemi bebonke.
201	Sample correlation coefficient	isampulu yonxulumano esisigxina	A sample statistic that measures the degree of linear association between two random variables.	Isampulu yemilinganiso yenkcukacha-manani elinganisa amaqondo onxulumano lomgca phakathi kwezinto ezimbini ezitshintshayo ezingenamkhethe.
202	Sample maximum	inani elikhulu kwisampuli	1. The maximum value of a numerical variable in a sample.	1. Elona xabiso liphezulu lenani elitshintshayo kwisampulu.
203	Sample mean	umyinge wesampuli	1. The sample average of a sample, obtained by dividing the sum of numerical values of a variable in a sample by the sample size.	1. Isampulu yeaverejei yesampulu, efunyenwe ngokwahlula umdibaniso enani lamaxabiso ento etshintshayo kwisampulu [ngesayizi yesampulu].
204	Sample size	ubungakanani besampuli	1. The number of items or observations that constitute a sample.	1. Inani lezinto okanye iingqwalaselo ezakha isampulu.
205	Sample space	iintlobo zeziphumo kwisampuli	1. The set of all possible outcomes of a repeatable experiment.	1. Isethi yazo zonke iziphumo ezinokubakhona zomfuniselo ophindekayo.
206	Sample space	zonke iintlobo zeziphumo kwisampulu	2. The range of values of a random variable.	2. Uluhlu lwamaxabiso ento etshintshayo engenamkhethe.
207	Signed number	sayinidinamba	1. A number indicating both a quantity and a direction (either positive or negative).	1. Inani elibonisa zombini ubuninzi nomyalelo (nokuba

				liyaqhubeka okanye liyarhoxa).
208	Subset	isetana	1. Any set made up of the members of a specified set. The set A is a subset of B if every element of A is also one of the elements of B.	1. Nayiphi isethi eyenziwe ngamalungu esethi echaziweyo. Isethi u- A yisetana yesethi u- B ukuba onke amalungu ka- A kananjalo ngamalungu ka-B.
209	Substitution	utshintsho	1. Replacement of variables by their values or by equivalent expressions, usually followed by collection of terms and simplification.	1. Ukubuyisela izimeli-manani ngamaxabiso azo okanye ngeembonakalo ezilinganayo, kudla ngokulandelwa yingqokelela yamagama e-aljebra nokwenza lula.
210	Subtract	thabatha	1. Add the additive inverse, e.g. $a - b = a + (-b)$.	1. Dibanisa umguqulelwa wokudibanisa, umz., $a - b = a + (-b)$.
211	Subtraction	ukuthabatha	1. Addition of the additive inverse.	1. Ukudibanisa umguqulelwa wokudibanisa.
212	Sum	isam; isiphumo sokudibanisa	1. An outcome of an addition of expressions or values.	1. Isiphumo somdibaniso wembonakalo okanye amaxabiso.
213	Summation	ukudibanisa	1. Addition of a set of numbers or expressions.	1. Ukudibanisa isethi yamanani okanye iimbonakalo.
214	Supplementary angle	saplimentaliengile	1. Any two angles whose measures sum to 180 degrees.	1. Nazipi ii-engile ezimbini ezo umdibaniso wemilinganisayo yazo ingamaqondo ali-180.
215	Slope	ithambeka	1. The ratio of vertical to horizontal change between any 2 points along the graph of a line.	1. Ukwalamana kwenguqu yokuthi nkqo nokunqamleza phakathi kweencam ezi-2 ukuhamba nomgca wegrafu.
	T			
216	Tangent	thanjenti	1. A line intersecting a curve at exactly one point inside a subset of the curve.	1. Umgca othintela igophe ngqo kwincam enye ngaphakathi kwesetana yesethi yegophe.
217	Term	themu; igama	1. A value or expression involving signed numbers, variables and powers, intended to signify a single mathematical entity. (See Expression.)	1. Ixabiso okanye imbonakalo ebandakanya amanani asayiniweyo, izimeli-manani namani ophindaphindo, ngenjongo yokuphawula into enye yemathematika. (Jonga imbonakalo).
218	Test statistic	uvavanyo lweenkcukachamanani	1. A statistic whose value is used in hypothesis testing to decide between a null hypothesis and an alternative hypothesis.	1. Inkukacha-manani leyo ixabiso layo lisetyenziswa kuvavanyo lwengcinga eyandulela uvavanyo ukuthatha isigqibo phakathi kwengcinga ethathwa njengenyani etshitshisiweyo nenye ingcinga eyandulela uvavanyo yakuqala.
219	Theorem	thiyorem	1. A mathematical statement or rule whose truth is deduced and proved from axioms, either directly or indirectly through prior theorems.	1. Inkcazo yemathematika okanye umthetho lowo inyaniso yawo ithathwa yaye ingqinwa ziintetho ezithathwa njengenyani, nokuba ngokungqalileyo okanye ngokungangqalanga

				ngeetheyorem zangaphambili.
220	Triangle	trayiengile; unxantathu	1. A three-sided polygon.	1. Ipholigoni enamacala amathathu.
221	True mean	umyinge wokwenene	1. The population mean. (In contrast with Sample mean.)	1. Umndilili wamalungu. (Thelekisa [nomndilili wesampulu])
222	True value	ixabiso lokwenene	1. An actual value.	1. Ixabiso lokwenene.
223	Type I error	imposiso yohlobo loku1	1. The mistaken rejection of the null hypothesis in a hypothesis test, when that hypothesis is in fact true, and should be accepted.	1. Ukulahla ngempazamo ingcinga eyandulela uvavanyo etshitshisiweyo kuvavanyo lwengcinga ethathwa njengenyani, xa loo ngcinga eyandulela uvavanyo ezinyanisiweni iyinyani, yaye kufuneka yamkelwe.
224	Type II error	imposiso yohlobo lwesi2	1. The mistaken acceptance of the null hypothesis in a hypothesis test, when that hypothesis is false, and should be rejected.	1. Ukwamkela ngempazamo ingcinga eyandulela uvavanyo etshitshisiweyo kuvavanyo lwengcinga yokuqala, xa loo ngcinga eyandulela uvavanyo ibubuxoki, yaye kufuneka ilahlwe.
225	Transversal	transvesali; nqamlezayo	1. Any line that intersects another line or collection of lines.	1. Nawuphi umgca onqamlez omnye umgca okanye ingqokelela yemigca.
226	Trapezoid	traphizoyidi	1. A quadrilateral with at least one set of opposite sides in parallel.	1. Umacalamane (i-quadrilateral) onobuncinane isethi enye yamacala achaseneyo.
227	Treatment	ulawulo; usetyenzo	1. A condition that researchers can selectively administer to randomly chosen experimental units or subjects in an experimental study. The intention of the study is to make inferences about the efficacy of the treatment in achieving desired changes.	1. Imeko leyo abaphandi banokuyilawula ngokukhethayo ukukhetha ngokungenamkhethe iiyuniti okanye abalingwa kuphononongo lomfuniselo. Injongo yophononongo kukwenza iintelekelelo malunga nokusebenza ngempumelelo konyango ekufikeleleni iinguqu ezinqwenelwayo.
	U			
228	Unconditional probability	okunokwenzeka okungathandabuzekiyo	1. The probability of occurrence of an event, assuming no other information is given.	1. Ithemba lokungathi isiganeko singenzeka, xa kuthathwa ukuba alukho olunye ulwazi olunikiweyo.
229	Undefined	okungachazwanga	Having a quantity that is not defined or does not exist	
230	Union	umanyano	1. The union of sets A and B is the set of all elements that are either in A or in B or in both A and B.	1. Umanyano lweesethi A no-B yisethi yawo onke amalungu akhona nokuba kuku-A okanye ku-B okanye kuzo zombini u-A no-B.
231	Universal set	isethi jikelele; isethi ephangaleleyo	1. The set of all elements assumed to be relevant in a given context.	1. Isethi yawo onke amalungu athathwa

				efanelekile kwimeko enikiweyo.
232	Upper quartile	ikhwathayili engaphezulu	1. A value which exceeds 75% of all data values and is less than the remaining 25% of data values. Within an ordered data set of n data values, the lower quartile occupies a rank $n/4$ from the maximum rank.	1. Ixabiso eligqitha ama-75% awo onke amaxabiso edata, yaye linganeno kwamaxabiso edata ashiyekileyo angama-25%. Phakathi kwesethi yedata ehleliweyo yamaxabiso edata angu- n , isine esisezansi sithathe udidi lwe- $n/4$ ukusuka kolona didi luphezulu.
	V			
233	Value	ixabiso; velyu	1. A number, obtained by observation or substitution.	1. Inani, elifunyenwe ngokuqwalasela okanye ngokuthathela indawo.
234	Variability	variyebhilithi; ukwahlukana kwamanani	1. The spread of values in a variable or a probability distribution.	1. Ukwendleleka kwamaxabiso kusasazo lwesimeli-manani okanye enokwenzeka.
235	Variable	variyebhuli; isimelimanani	1. A letter that represents an arbitrary numerical value.	1. Unobumba omele ixabiso lenani lokuzithandela.
236	Variance	variynsi; uhlehlengiselo locwangciso	1. A measure of statistical dispersion of a variable, namely the average of the squared deviations of its many values from their expected value.	1. Umlinganiso wosasazo lwenkcukacha-manani lwento etshintshayo, kukuthi umndilili weziphambuko ezisikwere zamaxabiso amaninzi ukusuka kwixabiso lawo elilindelekileyo.
237	Variation	variyeishini; ukutshintshatshintsha	1. Contrasting appearances and measures.	1. Thelekisa iimbonakalo nemilinganiso.
238	Vector	vektha;	1. An array indicating a distance and direction in n -dimensional space.	1. Uluhlu olubonisa umgama nomyalelo kwisithuba somlinganis ongu- n .
239	Venn diagram	isazobe sikaVenn; idayagram kaVen	1. A diagram representing a universal set and mathematical relationships between subsets, by means of overlapping regions within a rectangular figure.	1. Umzobo omele isethi jikelele nonxulumano lwemathematika phakathi kweesetana zesethi, ngendlela yokuqabelana kwemimandla phakathi kwesazobe esifana noxande.
240	Vertex	incopho; ivetheksi	1. The endpoint of an edge of a polygon.	1. Incam yesiphelo somphetho wepholigoni.
241	Vertex	incopho; ivetheksi	2. The minimum or maximum point of a graph.	2. Eyona ncam incinci okanye inkulu yegrafu.
242	Vertical line	umgca ohlayo	1. A line of the form $x = a$; i.e. a line whose slope is undefined.	1. Umgca wohlobo lwe- $x = a$; oko kukuthi umgca lowo ithambeka lawo lingacaciswanga.
243	Volume	umthamo; ivolyum	1. A measure of the space occupied by a three-dimensional figure, given as the number of cubic units needed to precisely fill the figure.	1. Umlinganiso wesithuba esithathwe sisazobe semilinganiso emithathu, onikwe njengenani leeyunithi tyhubhiki ezifunekayo ukugcwalisa isazobe ngqo.
	W			
244	Whole numbers	amanani apheleleyo; howulinamba	1. The set $\{0, 1, 2, 3, \dots\}$.	1. Isethi engu- $\{0, 1, 2, 3, \dots\}$.
	X			

245	x-axis	eksi-eksisi; x-eksisi; aksis ka-x; iasi ka-x	1. The horizontal axis of the rectangular coordinate system.	1. I-eksisi enqamlezayo yenkqubo yesilungelelanisi esifana noxande.
246	x-coordinate	eksikhodineyishini; x-khodineyishini; ulungelelwano luka-x	1. A signed distance from the origin to a line perpendicular to the x-axis passing through a specified point. See Abscissa.	1. Umgama osayiniweyo ukusuka kwimvelaphi yomgca othe nkqo ukuya kwi-eksisi engu-x egqitha kwincam echaziweyo. Jonga i-absisa.
247	x-intercepts	eksi-intasepthi; uxabo luka-x; x-intasepthi	1. The x-values of the points where a graph crosses the x-axis; i.e. for the graph of a function f , the solutions of the equation $f(x) = 0$.	1. Amaxabiso ka-x eencam apho igrafu iwela i-eksisi ka-x, oko kukuthi ukwenzela igrafu yomsebenzi ongu- f , izisombululo ze-ikhweyizhini engu- $f(x) = 0$.
	Y			
248	y-axis	wayi-aksisi; ieksis ka-y; iasi ka-y; y-eksisi	1. The vertical axis of the rectangular coordinate system.	1. I-eksisi ethe nkqo yenkqubo yesilungelelanisi esifana noxande.
249	y-coordinate	wayikhodineyishini; ulungelelwano luka-y; y-khodineyishini	1. A signed distance from the origin to a line perpendicular to the y-axis passing through a specified point. (See Ordinate.)	1. Umgama osayiniweyo ukusuka kwimvelaphi ukuya kumgca othe nkqo kwi-eksisi engu-y egqirha kwincam echaziweyo. Jonga umgca othe tyaba onxusene nasiphi isilungelelanisi.
250	y-intercepts	uxabo luka-y; wayi-intasepthi; y-intasepthi	1. The y-values of the points where a graph crosses the y-axis; i.e. for the graph of a function f , the value of $f(0)$.	1. Amaxabiso ka-y eencam apho igrafu iwela i-eksisi ka-y; oko kukuthi, ukwenzela igrafu yomsebenzi ka- f , ixabiso lika- $f(0)$.
	Z			
251	Zero exponent	iziroekspONENTI	1. A non-zero expression or value raised to the power 0. The resulting value is always 1.	1. Imbonakalo engenguye unothi okanye ixabiso lenani lokuphindaphinda elingu-0. Isiphumo sexabiso ngamaxesha onke ngu-1.



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