

## English - Welsh

English	Welsh
abelian	abel
addition	adiad
adjacency matrix	matrics cyfagosrwydd
adjoint	atgyd
adjugate	atgydiol
ambient	amgylchol
analytic	analytig
antiderivative	gwrthddeilliad
antipode	cyferbwynt
annulus	anwlws
approximate	brasamcanu
argument	arg
articulation point	pwynt cynaniad
associative	cysylltiadol
associativity	cysylltiadedd
augmented matrix	matrics estynedig
axiom	gwireb
backtracking	gwrthgilio
basis	sail
bijjective	deusaethol
bilinear	deulinol
binary operation	gweithrediad deuaid
bipartite	deurannol
bisect	hanerydd
bound	arffin
boundary	ffin
bounded above	ffinedig uchod
bounded below	ffinedig isod
bracket	cromfach
branch and bound	fforchio a chyfyngu
breadth	lled
candidate solution	datrysiad ymgais
cardinality	prifoledd
cartesian form	ffurf cartesaid
chinese postman problem	problem y dyn bost tsieineaidd
circuit	cylchred
circumscribed circle	amgylch
closedness	caeoldeb (?)
closure	caefa

English	Welsh
coefficient	cyfernod
collinear	unllin
combinatorial	cyfuniadol
complex conjugate	cyfiau cymhlyg
commutative	cymudol
commutativity	cymudedd
complement	cyflenwad
complex numbers	rhifau cymhlyg
concave	ceugrwm
concurrent	cytgroes
congruency	cyfathiant
connected	cysylltiedig
connectivity	cysylltedd
conservative	cadwrol
continuous	di-dor
continuously differentiable	differadwy yn ddi-dor
contour integral	integryn amlin
contradiction	gwrthddywediad
converge	cydgyfeirio
convex	amgrwm
correlation	cydbethyniad
cumulative distribution function	ffwythiant dosraniad cronus
cycle	cylchlwybr
cylindrical	silindrog
debug	datbygio
decent method	dull disgyniad
decomposition	dadelfeniad
degenerate	dirywiedig
degree	gradd
denominator	enwadur
depth	dyfnder
derivative	deilliad
diagonal	croeslin
diagonalisability	croeslinedd
diagonalisable	croeslinadwy
differentiability	differadwyedd
differentiable	differadwy
dimension	dimensiwn
directed graph	graff cyfeiriedig

English	Welsh
directional derivative	deilliad cyfeiriadol
discrete	arwahanol
disjoint set	set digyswllt
distributivity	dosbarthedd
diverge	dargyfeirio
domain	parth
domain of integration	parth integru
edge-weighted graph	graff ymyl-pwysedig
ellipse	elips
endomorphism	endomorfedd
endpoint	diweddbwynt
entire	cyfan
equality	hafaidd
equivalence relation	perthynas cywerthedd
estimation lemma	lemma amcangyfrif
extrema	eithafion
factorisation	ffactoriad
feasible	dichonadwy
field	maes
finite	meidraidd
function	ffwythiant
fundamental theorem of calculus	theorem sylfaenol calcwlws
generating function	ffwythiant generadu
geodesic	geodesig
global optimum	optimwm eang
group	grŵp
heuristic	dull hewristig
holomorphic	holomorffig
homogeneous	homogenaidd
homomorphism	homomorffedd
identity	unfathiant
identity matrix	matrics unfathol
incident (graph theory)	trawol
indentation	mewnoliadau
indicial equation	hafaliad indecsol
infinitesimal	gorfychan
injective	mewnsaethol
inner product	lluoswm mewmol
inscribed circle	mewngylch

English	Welsh
integer	cyfanrif
intersection	croestoriad
intractable	anhysbwrus
intractibility	anhysbwrdd
inverse	gwrthdro
isometry	isometreg
isomorphic	isomorffig
joint distribution	cyd-ddosraniad
kernal	cnewyllyn
kurtosis	cwrtosis
length	hyd
limit	terfan
linear combination	cyfuniad llinol
linear dependence	dibyniaeth linol
linear independence	annibyniaeth linol
linear transformation	trawsffurfiant llinol
linearly dependent	llinol ddibynnol
linearly independent	llinol annibynnol
local optimum	optimwm lleol
logistic	logistaidd
loop (graph theory)	dolen
lower bound	arffin isaf
lune	lŵn
mapping	mapiad
marginal	ymylol
matching	cydweddiad
matrix	matrics
maximum	uchafbwynt
median	canolrif
median (triangles)	llin canol
meromorphic	meromorffig
metric space	gofod metrig
minimum	isafbwynt
minor	lleddf
monotone	monoton
multigraph	aml-graff
multiplicity	lluosogrwydd
multiplier	lluosydd
multiset	aml-set

English	Welsh
mutually exclusive	cydanghynhwysol
n-periodic	n-cyfnodol
n-tuple	n-blyg
non-degenerate	annirywiedig
non-empty	anwag
non-trivial	annistadl
nullity	dirymiad
numerator	rhifiadur
operation	gweithrediad
operational research	ymchwil weithrediadol
operations	gweithrediadau
ordered pairs	parau trefnedig
origin	tarddbwynt
parameterisation	paramedriad
parameterise	paramedreiddiwch
partial derivative	deilliad rhannol
partition	ymraniad
path	llwybr
percentile	canradd
permutations	trynewidion
phase curve	cromlin gwedd
plane	plân
polar form	ffurf pegynlinol
pole	pegwn
precision	trachywriedd
prime number	rhif cysefin
principal value	penrhif
principle argument	prif arg
probability density function	ffwythiant dwysedd tebygolrwydd
probability mass function	ffwythiant màs tebygolrwydd
quadrant	pedrant
quantile	cwantel
quartile	chwartel
quotient	cyniferydd
radical	radical
random decent	hap-ddisgyniad
random number	haprif
range	amrediad
rank	ranc

English	Welsh
rational numbers	rhifau cymarebol
real numbers	rhifau real
reciprocal	cilydd
recurrence relation	perthynas ailadroddadwy
recursive	dychweliadol
reduced row echelon form	ffurf echelon rhes gostyngol
reflexive	ymatblyg
reflexivity	ymatblygedd
residue	gwaddod
reverse triangle inequality	anhafaledd triongl gwrthwyneb
rural postman problem	problem y dyn bost gwledig
saddle point	pwynt ffurfdro
scalar multiplication	lluosiad sgalar
sequence	dilyniant
series expansion	ehangiad cyfres
sesquilinear	sescwilinol
set	set
simply connected region	rhanbarth cysylltiedig syml
simulated annealing	ffug-anelio
singularity	hynodyn
sink (graph theory)	suddfan
skew-symmetric	sgiw-gymesur
skewness	sgiwedd
solution space	gofod datrysiadau
source (graph theory)	tarddle
span	rhychwant
spanning	rhychwantu
spanning tree	coeden rhychwantu
sparse	gwasgarog
star centre	canol serennol
starlit region	rhanbarth seren oleuol
stationary point	pwynt arhosol
strong principle of induction	egwyddor gref anwythiad
subgroup	is-grŵp
subset	is-set
subspace	is-ofod
subtraction	tynnu
surface	arwyneb
surjective	arsaethol

English	Welsh
symmetric matrix	matrics cymesur
tabu search	chwiliad tabŵ
tangent	tangiad
trace	olin
transcendental	trosgynnol
transform	trawsffurf
transitivity	transitiffiaeth
transpose	trawsddodyn
transposition	trawsddodiad
triangle inequality	anhafaledd triong!
triangulation	triongliant
turning point	trobwynt
unbounded	diarffin
union	uniad
unique	unigryw
universal set	set gynhwysol
upper bound	arffin uchaf
upper triangular	trionglog uchaf
variable	newidyn
vector	fector
vector space	gofod fector
well defined	clir-ddiffiniedig
zero	sero

## Cymraeg - Saesneg

Cymraeg	Saesneg
abel	abelian
adiad	addition
amgrwm	convex
amgylch	circumscribed circle
amgylchol	ambient
aml-graff	multigraph
aml-set	multiset
amrediad	range
analytig	analytic
anhafaledd triongl	triangle inequality
anhafaledd triongl gwrthwyneb	reverse triangle inequality
anhydryn	intractable
anhydrinedd	intractability
annibyniaeth linol	linear independence
annirywiedig	non-degenerate
annistadl	non-trivial
anwag	non-empty
anwlws	annulus
arffin	bound
arffin isaf	lower bound
arffin uchaf	upper bound
arg	argument
arsaethol	surjective
arwahanol	discrete
arwyneb	surface
atgyd	adjoint
atgydiol	adjugate
brasamcanu	approximate
cadwrol	conservative
caefa	closure
caeoldeb (?)	closedness
canol serennol	star centre
canolrif	median
canradd	percentile
ceugrwm	concave
chwartel	quartile
chwiliad tabŵ	tabu search
cilydd	reciprocal
clir-ddifiniedig	well defined

Cymraeg	Saesneg
cnewyllyn	kernal
coeden rhychwantu	spanning tree
croeslin	diagonal
croeslinadwy	diagonalisable
croeslinedd	diagonalisability
croestoriad	intersection
cromfach	bracket
cromlin gwedd	phase curve
cwantel	quantile
cwrtosis	kurtosis
cyd-ddosraniad	joint distribution
cydanghynhwysol	mutually exclusive
cydbethyniad	correlation
cydgyfeirio	converge
cydweddiad	matching
cyfan	entire
cyfanrif	integer
cyfathiant	congruency
cyferbwynt	antipode
cyfernod	coefficient
cyfiau cymhlyg	complex conjugate
cyflenwad	complement
cyfuniad llinol	linear combination
cyfuniadol	combinatorial
cylchlwybr	cycle
cylchred	circuit
cymudedd	commutativity
cymudol	commutative
cyniferydd	quotient
cysylltedd	connectivity
cysylltiadedd	associativity
cysylltiadol	associative
cysylltiedig	connected
cytgroes	concurrent
dadelfeniad	decomposition
dargyfeirio	diverge
datbygio	debug
datrysiaid ymgais	candidate solution
deilliad	derivative

Cymraeg	Saesneg
deilliad cyfeiriadol	directional derivative
deilliad rhannol	partial derivative
deulinol	bilinear
deurannol	bipartite
deusaethol	bijective
di-dor	continuous
diarffin	unbounded
dibyniaeth linol	linear dependence
dichonadwy	feasible
differadwy	differentiable
differadwy yn ddi-dor	continuously differentiable
differadwyedd	differentiability
dilyniant	sequence
dimensiwn	dimension
dirymiad	nullity
dirywiedig	degenerate
diweddbwynt	endpoint
dolen	loop (graph theory)
dosbarthedd	distributivity
dull disgyniad	decent method
dull hewristig	heuristic
dychweliadol	recursive
dyfnder	depth
egwyddor gref anwythiad	strong principle of induction
ehangiad cyfres	series expansion
eithafion	extrema
elips	ellipse
endomorffedd	endomorphism
enwadur	denominator
fector	vector
ffactoriad	factorisation
ffin	boundary
ffinedig isod	bounded below
ffinedig uchod	bounded above
fforchio a chyfyngu	branch and bound
ffug-anelio	simulated annealing
ffurf cartesaidd	cartesian form
ffurf echelon rhes gostyngol	reduced row echelon form
ffurf pegynlinol	polar form

Cymraeg	Saesneg
ffwythiant	function
ffwythiant dosraniad cronrus	cumulative distribution function
ffwythiant dwysedd tebygolrwydd	probability density function
ffwythiant generadu	generating function
ffwythiant màs tebygolrwydd	probability mass function
geodesig	geodesic
gofod datrysiaidau	solution space
gofod fector	vector space
gofod metrig	metric space
gorfychan	infinitesimal
gradd	degree
graff cyfeiriedig	directed graph
graff ymyl-pwysedig	edge-weighted graph
grŵp	group
gwaddod	residue
gwasgarog	sparse
gweithrediad	operation
gweithrediad deuaidd	binary operation
gweithrediaidau	operations
gwireb	axiom
gwrthddeilliad	antiderivative
gwrthddywediad	contradiction
gwrthdro	inverse
gwrthgilio	backtracking
hafaledd	equality
hafaliad indecsol	indicial equation
hanerydd	bisect
hap-ddisgyniad	random decent
haprif	random number
holomorffig	holomorphic
homogenaidd	homogeneous
homomorffedd	homomorphism
hyd	length
hynodyn	singularity
integryn amlin	contour integral
is-grŵp	subgroup
is-ofod	subspace
is-set	subset
isafbwynt	minimum

Cymraeg	Saesneg
isometreg	isometry
isomorffig	isomorphic
lemma amcangyfrif	estimation lemma
lled	breadth
lleddf	minor
llyn canol	median (triangles)
llynol annibynnol	linearly independent
llynol ddibynnol	linearly dependent
lluosiad sgalar	scalar multiplication
lluosogrwydd	multiplicity
lluoswm mewnol	inner product
lluosydd	multiplier
llwybr	path
logistaidd	logistic
lŵn	lune
maes	field
mapiad	mapping
matrics	matrix
matrics cyfagosrwydd	adjacency matrix
matrics cymesur	symmetric matrix
matrics estynedig	augmented matrix
matrics unfathol	identity matrix
meidraidd	finite
meromorffig	meromorphic
mewngylch	inscribed circle
mewnoliadau	indentation
mewnsaethol	injective
monoton	monotone
n-blyg	n-tuple
n-cyfnodol	n-periodic
newidyn	variable
olin	trace
optimwm eang	global optimum
optimwm lleol	local optimum
paramedreiddiwrch	parameterise
parametriad	parameterisation
parau trefnedig	ordered pairs
parth	domain
parth integru	domain of integration

Cymraeg	Saesneg
pedrant	quadrant
pegwn	pole
penrhif	principal value
perthynas ailadroddadwy	recurrence relation
perthynas cywerthedd	equivalence relation
plân	plane
prif arg	principle argument
prifoledd	cardinality
problem y dyn bost gwledig	rural postman problem
problem y dyn bost tsieineaidd	chinese postman problem
pwynt arhosol	stationary point
pwynt cynaniad	articulation point
pwynt ffurfdro	saddle point
radical	radical
ranc	rank
rhanbarth cysylltiedig syml	simply connected region
rhanbarth seren oleuol	starlit region
rhif cysefin	prime number
rhifau cymarebol	rational numbers
rhifau cymhlyg	complex numbers
rhifau real	real numbers
rhifiadur	numerator
rhychwant	span
rhychwantu	spanning
sail	basis
sero	zero
sescwilinol	sesquilinear
set	set
set digyswllt	disjoint set
set gynhwysol	universal set
sgiw-gymesur	skew-symmetric
sgiwedd	skewness
silindrog	cylindrical
suddfan	sink (graph theory)
tangiad	tangent
tarddbwynt	origin
tarddle	source (graph theory)
terfan	limit
theorem sylfaenol calcwlws	fundamental theorem of calculus

Cymraeg	Saesneg
trachywriedd	precision
transitiffiaeth	transitivity
trawol	incident (graph theory)
trawsddodiad	transposition
trawsddodyn	transpose
trawsffurf	transform
trawsffurfiant llinol	linear transformation
triongiant	triangulation
trionglog uchaf	upper triangular
trobwynt	turning point
trosgynnol	transcendental
trynewidion	permutations
tynnau	subtraction
uchafbwynt	maximum
unfathiant	identity
uniad	union
unigryw	unique
unllin	collinear
ymatblyg	reflexive
ymatblygedd	reflexivity
ymchwil weithrediadol	operational research
ymraniad	partition
ymylol	marginal