



UNSW
THE UNIVERSITY OF NEW SOUTH WALES

**EDUCATIONAL ASSESSMENT
AUSTRALIA**

ICAS MATHS GLOSSARY

DRAFT CONSULTATION VERSION BETA 0.1

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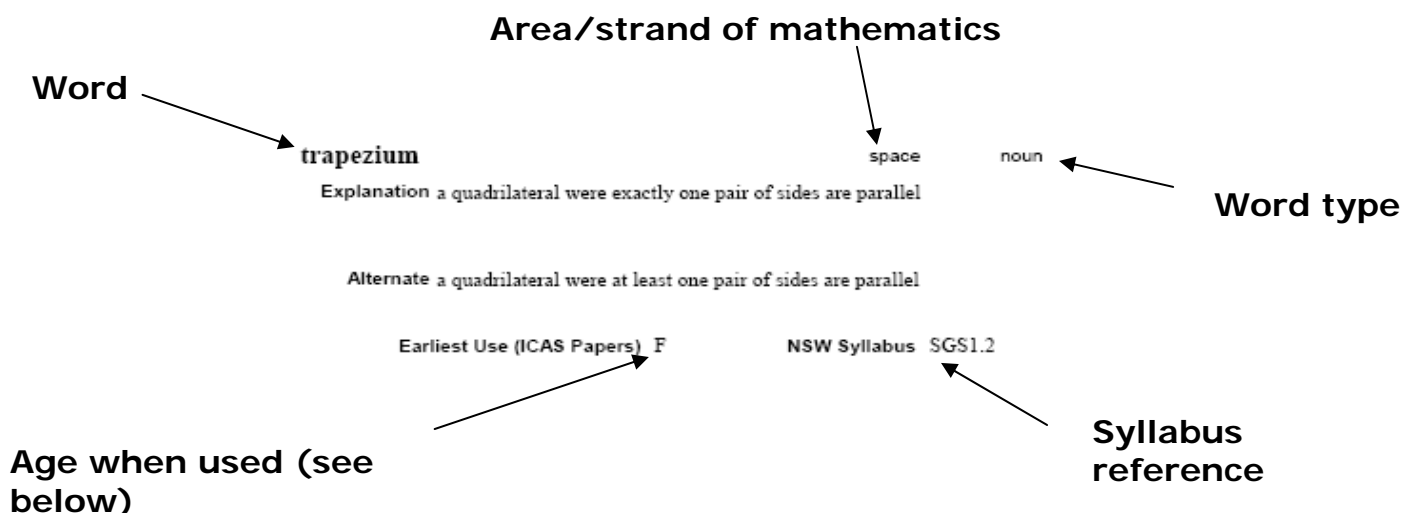
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Using the glossary

Thank you for looking at this draft version of the ICAS Mathematics glossary. Feedback and advice are essential in making this a worthwhile document.

The glossary is listed in simple alphabetical order. It is a list of words commonly used in school mathematics with an explanation of their meaning, alternate meanings and references to other documents. The primary purpose of the glossary was to aid the construction of valid mathematics tests by ensuring the use of appropriate language. In addition to this purpose the glossary may become a useful resource for parents, teachers and students.

The diagram shows the typical structure of an entry in the glossary.



The age reference is given in terms of a letter code for an ICAS Paper. The letter code is used due to different numberings of year groups in New Zealand and other countries. The table gives a guide for reading the letter code.

	Australia	New Zealand
A	3	4
B	4	5
C	5	6
D	6	7
E	7	8
F	8	9
G	9	10
H	10	11
I	11	12
J	12	13
X	Undecided or the word is not used or is not used without explanation	

In some cases a word may have a secondary meaning or there may be some significant variation in definition. In this case a second explanation of the word is given.

A reference is also given to the NSW mathematics syllabus. This is on the basis of identifying occurrences in a range of syllabus documents. The reference may be faulty and the reference should be treated with caution. In time references to other syllabus documents may be given.

What the glossary is not

- The glossary is not an authoritative dictionary of mathematics nor is it intended to supersede commercial dictionaries. The explanations are meant to indicate our usage of the word in the context of a mathematics test.
- The glossary is not a syllabus document. Although a range of Australia syllabus documents have been consulted in writing the glossary, teachers should consult their own state syllabus documents for guidance on word usage.
- The glossary is not a finished document. This is a draft version which is being released to encourage feedback. There may well be typos, spelling errors or incorrect definitions. We welcome any information about errors.
- The glossary is not intended to be a commercial publication. EAA is producing the document to improve its own internal processes and to improve communication with schools that use our assessments. A side benefit of that is a free resource that we are happy for others to use and make reference to.
- The glossary is not a definitive guide to how a word may have been used in past tests, assessments or competitions produced by EAA. We hope that the glossary will improve consistency of usage.

Feedback welcome

Meaning arises out of agreement. Any and all feedback about the glossary is welcome and encouraged. By incorporating your feedback into future editions, the glossary will grow and improve.

Please send any comments to: MathsGlossary@eaa.unsw.edu.au

about (as in approximate)

measurement adjective

Explanation nearly or close to a value.**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS3.2

acute angle

geometry noun

Explanation an angle which measures between 0 degrees and 90 degrees.**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** SGS3.2b

acute-angled triangle

space noun

Explanation a triangle which has three internal angles measuring less than 90 degrees**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** SGS4.3

add

number verb

Explanation perform an addition, find a total of two (or more) numbers**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.2

addition symbol +

number symbol

Explanation symbol of the binary operation of addition**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.2

algebra

algebra noun

Explanation the part of mathematics that looks at the abstract property of numbers and the underlying structure of numbers

Alternate**Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS4.1

algebraic

algebra adjective

Explanation relating to algebra

Alternate**Earliest Use (ICAS Papers)** G**NSW Syllabus** PAS4.1

alpha-numeric grid

space noun

Explanation a grid showing position by using numbers to label rows and letters to label columns

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** SGS2.3

am

measurement noun

Explanation indicating a time after 12 midnight and before 12 noon

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** MS3.5

am and pm notation

measurement phrase

Explanation a way of indicating time in 12 hour intervals, indicating which half of the day with 'am' or 'pm'

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** MS3.5

analog time

measurement noun

Explanation alternate spelling of "analogue"**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** MS2.5

analogue clock (analog)

measurement noun

Explanation a normal clock with hands indicating time**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** MES1.5

analogue time

measurement noun

Explanation time shown by the hands on the clock**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** see "analog"

angle

geometry noun

Explanation a mathematical object formed by two lines meeting or the measure of turn needed to move one of the lines onto the other**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS1.2

approximately

measurement adjective

Explanation applied to values that are not given exactly but are given to a useful degree of accuracy**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** MS4.1

area measurement noun

Explanation a measure of the amount of two-dimensional space covered

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus MES1.2

arrowhead space noun

Explanation a concave quadrilateral where adjacent sides are equal

Alternate any concave quadrilateral

Earliest Use (ICAS Papers) ?

NSW Syllabus -

axes data noun

Explanation the plural of axis

Alternate

Earliest Use (ICAS Papers) F

NSW Syllabus PAS4.5

axis data noun

Explanation a straight line usually of some significance such as a coordinate axis, an axis of symmetry or an axis of rotation

Alternate

Earliest Use (ICAS Papers) F

NSW Syllabus PAS4.5

axis of rotation space noun

Explanation a line about which a solid has rotational symmetry or a line about which a solid has been rotated

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus SGS4.1

axis of symmetry

space

noun

Explanation a line about which a shape or figure is symmetrical**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS5.3.4

bar chart

data

noun

Explanation a column graph, particularly one where the columns are horizontal**Alternate** a divided bar graph where a single bar is split according to the relative proportion of the categories shown**Earliest Use (ICAS Papers)** E**NSW Syllabus** see column grap

bar graph

data

noun

Explanation see bar chart**Alternate** as a synonym for a divided bar graph where a single bar is split according to the relative proportion of the categories shown**Earliest Use (ICAS Papers)** X**NSW Syllabus** see divided bar

BDMAS

number

noun

Explanation shorthand for the conventional order of operations**Alternate** sometimes BODMAS**Earliest Use (ICAS Papers)** X**NSW Syllabus** -

bearing

measurement noun

Explanation a direction given as an angle clockwise from North. Typically the angle is given as three-digits with leading zeros**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** MS5.2.3

bisect

geometry verb

Explanation cut in half, usually a line segment by length, or an angle**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** SGS4.3

box and whisker

data noun

Explanation a way of showing the distribution of some data over a range by visually representing the mean, quartiles and range of the data graphically**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** DS5.2.1

bracket

number noun

Explanation a way of grouping numbers and operations together to show in what order the operations should be done**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

bracket symbol (and)

number symbol

Explanation See "bracket" and "BDMAS"**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** NS4.2

calculator

number noun

Explanation an electronic device for performing arithmetic or mathematical operations**Alternate** any calculating aid**Earliest Use (ICAS Papers)** A**NSW Syllabus** NES1.1

calendar

measurement noun

Explanation a table showing days, dates and months**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MS1.5

cell (on a spreadsheet or table)

data noun

Explanation the intersection of a row and column**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** -

centicube

measurement noun

Explanation a cube with sides of 1 cm and a mass of 1 gram**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

centilitre

measurement noun

Explanation one hundredth of a litre**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

centimetre

measurement noun

Explanation one hundredth of a metre**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MS1.1

centre (of a circle)

geometry noun

Explanation the point that is an equal distance from all points on the circumference of a circle**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS3.2a

centre of rotation

space noun

Explanation the point around which a 2D shape is rotated**Alternate****Earliest Use (ICAS Papers)** ?**NSW Syllabus** -

cents

measurement noun

Explanation one hundredth of a dollar**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** NES1.1

century

measurement noun

Explanation one hundred years**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** -

certain

chance adjective

Explanation a term that describes an event that must occur**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.5

chance

chance noun

Explanation a synonym for probability**Alternate** a degree of probability above impossible (eg "there is a chance that it might rain")**Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.5

change (left over money)

measurement noun

Explanation the difference between an amount charge and the amount given**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** NS1.2

chord

geometry noun

Explanation a line segment joining two points on the circumference of a circle**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** SGS5.3.4

circle

space noun

Explanation a shape whose perimeter is a uniform distance from its centre**Alternate** also a verb to surround or to mark with an oval ("circle the correct answer")**Earliest Use (ICAS Papers)** A**NSW Syllabus** SGES1.2

circumference

geometry noun

Explanation the perimeter of a circle**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** SGS3.2a

cm

measurement symbol

Explanation symbol for centimetre

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus MS1.2

column graph

data noun

Explanation a diagram that shows the size of a set of categories by the height of bars, typically vertical

Alternate

Earliest Use (ICAS Papers) C

NSW Syllabus DS1.1

combination

data noun

Explanation the number of ways of picking n things from a collection of m things ignoring the order in which they are picked

Alternate any arrangement of things

Earliest Use (ICAS Papers) C

NSW Syllabus -

compass (geometric)

geometry noun

Explanation a device for drawing circles and arcs

Alternate

Earliest Use (ICAS Papers) ?

NSW Syllabus -

compass (magnetic)

space noun

Explanation a device for indicating direction

Alternate

Earliest Use (ICAS Papers) C

NSW Syllabus SGS2.3

compass point

space noun

Explanation a labelled direction following the scheme North, East, South, West (clockwise from North in steps of half turns)

Alternate**Earliest Use (ICAS Papers)** C**NSW Syllabus** SGS2.3

compass rose

space noun

Explanation the labelled directions on a compass

Alternate**Earliest Use (ICAS Papers)** C**NSW Syllabus** SGS2.3

compound event

chance noun

Explanation an event that can be analysed as two or more other events

Alternate**Earliest Use (ICAS Papers)** I**NSW Syllabus** NS5.3.2

compound interest

measurement noun

Explanation interest earned based on re-investing already earned interest

Alternate**Earliest Use (ICAS Papers)** I**NSW Syllabus** NS5.2.2

concave

space adjective

Explanation curved or angled toward the interior of a shape

Alternate**Earliest Use (ICAS Papers)** I**NSW Syllabus** see non-convex

cone

space

noun

Explanation a surface formed by a single point and a circular base, resembling a pyramid but with curved sides

Alternate any shape with a closed curve as a base rising to a single vertex

Earliest Use (ICAS Papers) A

NSW Syllabus SGS1.1

congruent

geometry

adjective

Explanation identical in size and shape but not necessarily in the same position or orientation. The reflection of shape is congruent to the shape and so congruent shapes remain congruent after being rotated, translated and reflected

Alternate there is a more general sense of congruence in other branches of mathematics

Earliest Use (ICAS Papers) G

NSW Syllabus SGS4.4

continuous data

data

noun

Explanation data that can take any value within a given interval

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus DS4.1

convex

space

adjective

Explanation curved or angled away from the interior of a shape

Alternate

Earliest Use (ICAS Papers) I

NSW Syllabus SGS4.1

coordinate

data

noun

Explanation a position described by two numbers (in two dimensional space) or three numbers (in three-dimensional space)

Alternate

Earliest Use (ICAS Papers) E

NSW Syllabus SGS2.3

coordinate notation

data noun

Explanation eg (2, 3) normally two number enclosed in brackets and separated by a comma for two-dimensional rectangular co-ordinates

Alternate**Earliest Use (ICAS Papers)** E**NSW Syllabus** PAS4.5

corner

space noun

Explanation a vertex of a shape

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS1.2

correlation

data noun

Explanation the extent to which two sets of data are related

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** -

cost

measurement noun

Explanation the amount of money needed to buy something or accomplish something. Note there is some difference in meaning between 'cost' and 'price' although in many circumstances the words are interchangeable

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** WMS2.1

counting numbers

number noun

Explanation the positive integers

Alternate**Earliest Use (ICAS Papers)** F**NSW Syllabus** NES1.1

cross-section (of solid)

space

noun

Explanation the two dimensional shape formed when a plane intersects a three dimensional object. Used loosely as a synonym for section

Alternate Strictly when the plane is at right angles to an axis of symmetry of the shape or when the plane is parallel to the base of the shape

Earliest Use (ICAS Papers) E

NSW Syllabus WMS3.3

cube

space

noun

Explanation a regular three-dimensional shape with 6 identical faces each of which is a square

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus SGS1.1

cube (operation)

number

verb

Explanation multiplying three instances of the same number together, eg 4 cubed is $4 \times 4 \times 4$

Alternate

Earliest Use (ICAS Papers) F

NSW Syllabus NS4.1

cube root

number

verb

Explanation the number that when cubed gives the target number

Alternate

Earliest Use (ICAS Papers) I

NSW Syllabus NS4.1

cube root (notation)

number

symbol

Explanation a symbol showing the operation of taking a cube root as a root symbol marked with a 3

Alternate

Earliest Use (ICAS Papers) I

NSW Syllabus NS4.1

cube symbol (operation)

number verb

Explanation the operation is shown by a superscript 3 on the right hand side of the number to be cubed

Alternate**Earliest Use (ICAS Papers)** F**NSW Syllabus** NS4.1

cube symbol (units)

measurement symbol

Explanation a superscript 3 indicating the measure is in cubed units

Alternate**Earliest Use (ICAS Papers)** C**NSW Syllabus**

cubic centimetre

measurement noun

Explanation the volume of a cube with sides of 1 cm

Alternate**Earliest Use (ICAS Papers)** C**NSW Syllabus** MS2.3

cuboid

space noun

Explanation see rectangular prism

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** -

cylinder

space noun

Explanation the surface formed by two parallel circles

Alternate the surface formed by two identical and parallel closed curves

Earliest Use (ICAS Papers) A**NSW Syllabus** SGS1.1

day measurement noun

Explanation Twenty four hours, or a specific 24 hour period during a year

Alternate the hours of daylight

Earliest Use (ICAS Papers) A

NSW Syllabus MES1.5

decade measurement noun

Explanation ten years

Alternate any interval of ten

Earliest Use (ICAS Papers) X

NSW Syllabus -

decimal (i.e. "decimal fraction") number noun

Explanation a way of representing numbers with fractional parts using fractions of powers of ten

Alternate

Earliest Use (ICAS Papers) E

NSW Syllabus NS2.4

decimal fraction number noun

Explanation a fractional value represented using powers of 10

Alternate

Earliest Use (ICAS Papers) D

NSW Syllabus (NS2.4)

decimal places number noun

Explanation positions after the decimal point in a number

Alternate

Earliest Use (ICAS Papers) D

NSW Syllabus NS2.4

degrees

geometry noun

Explanation a unit for measuring angles**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** SGS3.2b

degrees (notation)

geometry symbol

Explanation the unit 'degrees' is indicated by a small superscript circle. Note that this a specific symbol and not a superscript letter o or numeral 0**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** SGS3.2b

density

measurement noun

Explanation the mass of an object divided by its volume**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

depth

measurement noun

Explanation one of the three dimensions given for an object along with height and width**Alternate** a vertical distance below an arbitrary level (eg sea level)**Earliest Use (ICAS Papers)** D**NSW Syllabus** MS3.2

diagonal

geometry noun

Explanation a line which joins two non-adjacent vertices of a shape**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS5.2.2

diagram

data noun

Explanation a picture which conveys information**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.1

diameter

geometry noun

Explanation a line (and its length) which joins two points on a circle through the centre of the circle**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** SGS3.2a

dice

chance noun

Explanation a solid marked with numbers used in games of chance, typically having six sides**Alternate** only used as the plural with 'die' being the singular**Earliest Use (ICAS Papers)** A**NSW Syllabus** NS2.5

die

chance noun

Explanation singular form of dice - although 'dice' is now often used as both plural and singular**Alternate** see dice**Earliest Use (ICAS Papers)** A**NSW Syllabus** NS2.5

difference

number noun

Explanation the result of a subtraction**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.2

digital clock

measurement noun

Explanation a clock showing time in numerals**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** MES1.5

digital time

measurement noun

Explanation time shown using numerals separated by colons, as opposed to time represented by the position of hands on a clock**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

direct proportion

number noun

Explanation when one variable increases by the same proportion as a related variable increase eg for variable x and y when $x=ay$ for some constant a**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** -

discount

measurement noun

Explanation an amount of money or a proportion of money subtracted from a price**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** NS3.4

discrete data

data noun

Explanation data which can be modelled by whole numbers, non-continuous data**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** DS4.1

divide

number

verb

Explanation split a number into a given number of equal parts**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS2.3

divided bar graph

data

noun

Explanation a graph where a single bar is split according to the relative proportion of the categories shown**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** DS3.1

dividend

number

noun

Explanation a number that is being divided**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

division

number

noun

Explanation the operation where one number is split into a given number of equal parts**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS2.3

division symbol

number

symbol

Explanation the symbol for division**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.3

divisor

number noun

Explanation the number another number is being divided by**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** (NS2.3)

dollar

measurement noun

Explanation a common name for a unit of currency in several different countries**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.1

dollar symbol

measurement symbol

Explanation a symbol denoting dollars**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.1

double

number verb

Explanation multiply by 2**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.2

East

space noun

Explanation One of the four cardinal directions**Alternate****Earliest Use (ICAS Papers)** B**NSW Syllabus** SGS2.3

edge

space

noun

Explanation a line formed by the intersection of two faces

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus SGS1.1

enlarge

space

verb

Explanation change the size of the shape

Alternate increase the size of a shape

Earliest Use (ICAS Papers) F

NSW Syllabus SGS3.2a

enlargement

space

noun

Explanation a transformation that leads to the increase in the size of a shape

Alternate

Earliest Use (ICAS Papers) F

NSW Syllabus SGS4.4

equal

number

adjective

Explanation having the same value

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus NS1.2

equals symbol

number

symbol

Explanation a symbol that shows one quantity is the same as another

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus NS1.3

equilateral

space

noun

Explanation lines of equal length**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** -

equilateral triangle

space

noun

Explanation a triangle all of whose sides are equal**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** SGS3.2a

estimate

measurement noun

Explanation the value given by estimating**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** -

estimate

measurement verb

Explanation to judge the value of a measure or count inexactly but within sensible limits**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** NES1.1

estimating

measurement noun

Explanation the process of making an estimate**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** NS1.1

even (number)

number

adjective

Explanation an integer that can be divided by 2 without leaving a remainder**Alternate** a whole number that can be divided by 2 without leaving a remainder**Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.3

event

chance

noun

Explanation anything to which we can give a probability**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** NS2.5

exponent

number

noun

Explanation a number indicating the power a number is being raised to; a synonym of 'index'**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** NS5.1.1

expression

algebra

noun

Explanation a valid string of mathematical symbols, typically algebraic eg $2+3$, $7x+19$, $5 < 2x+1$, $2+2=1$ **Alternate** sometimes only those expressions which are not also equations or inequalities**Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS4.1

face

space

noun

Explanation the flat shape formed by a set of edges of a solid, which forms part of the surface of that solid**Alternate** sometimes only defined for polyhedra, and at the opposite extreme sometimes used for curved surfaces such as the "curved face" of a cylinder**Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS1.1

factor

number noun

Explanation An integer that divides a given number without leaving a remainder. A number is a factor of its multiples

Alternate Sometimes defined only for whole numbers, also defined for polynomials

Earliest Use (ICAS Papers) B

NSW Syllabus NS2.3

fair (as in coin or dice)

chance adjective

Explanation without bias, equally likely to lead to produce each outcome

Alternate

Earliest Use (ICAS Papers) E

NSW Syllabus NS2.5

flip

space verb

Explanation a transformation where a two-dimensional shape is turned through a third dimension as if to reveal its other side; equivalent to reflecting the shape

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus SGS1.2

formula

algebra noun

Explanation an equation which includes some variables and which defines a relationship between those variables

Alternate

Earliest Use (ICAS Papers) F

NSW Syllabus PAS4.4

formulae

algebra noun

Explanation a plural form of formula

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus PAS4.4

formulas

algebra noun

Explanation the preferred plural for formula in ICAS**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** see formulae

fortnight

measurement noun

Explanation two weeks, 14 days**Alternate****Earliest Use (ICAS Papers)** B**NSW Syllabus** -

fraction

number noun

Explanation a rational number, that is a number that can be expressed as a ratio between two integers. Normally a rational number that isn't equivalent to an integer, and often a rational number less than one.**Alternate****Earliest Use (ICAS Papers)** B**NSW Syllabus** NS1.4

fraction shown as one number over another

number symbol

Explanation a fraction shown as the ratio of two integers one on top of the other - as an incomplete division**Alternate****Earliest Use (ICAS Papers)** B**NSW Syllabus** NS1.4

fractional index notation

number symbol

Explanation representing an root as a superscript fraction (eg square root as a half)**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** NS5.1.1

frequency

data noun

Explanation a count of the number of occurrences of things in a given category**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** DS4.1

front view

space noun

Explanation the view of a three-dimensional objects from the 'front'**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS2.1

full turn

space noun

Explanation a 360 degree turn**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** -

function

algebra noun

Explanation a many-to-one relationship between two sets, typically an algebraic rule that has a unique output for each input value**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS4.2

gram

measurement noun

Explanation one thousandth of a kilogram**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MS2.4

graph

data

noun

Explanation a diagram showing a relationship between sets, usually numbers

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** DS1.1

graph paper

data

noun

Explanation paper laid out in squares to make it suitable for drawing coordinate axes

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** -

graphic calculator

number

noun

Explanation a calculator with the ability to display graphs

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** PAS4.5

greater than or equal to symbol

number

symbol

Explanation a symbol that shows one quantity (or variable) is the same value or a greater value than another

Alternate**Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS4.4

greater than symbol >

number

symbol

Explanation a symbol that shows one quantity is greater than another quantity but not equal to it

Alternate**Earliest Use (ICAS Papers)** F**NSW Syllabus** NS2.1

half

number noun

Explanation one part of something that has been split into two equally**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NES1.4

half turn

space noun

Explanation a 180 degree turn**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** -

halves

number noun

Explanation plural of half**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NES1.4

heads and tails (as in coin)

chance noun

Explanation the two names for the sides of a coin**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS2.5

hectare

measurement noun

Explanation a metric unit of area used for measuring plots of land, 10 thousand square metres**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** MS3.2

height

measurement noun

Explanation vertical distance**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MES1.1

heptagon

space noun

Explanation a seven sided polygon (sometimes called a heptagon)**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

heptagon

space noun

Explanation a seven sided polygon (sometimes called a septagon)**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

hexagon

space noun

Explanation a six sided polygon**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS1.2

histogram

data noun

Explanation a graph that use vertical bars to represent frequency of intervals of continuous data**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** DS4.1

horizontal

space noun

Explanation parallel to the horizon or the ground, conventionally a line parallel to the bottom edge of a rectangular piece of paper

Alternate**Earliest Use (ICAS Papers)** C**NSW Syllabus** SGS1.2

hour

measurement noun

Explanation 60 minutes

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** MS1.5

impossible

chance adjective

Explanation an event which cannot happen

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.5

index

number noun

Explanation a number indicating the power a number is being raised to; a synonym of 'exponent'

Alternate sometimes regarded only in the context of roots, for example in a cube root the index is 3, whereas the exponent is a third

Earliest Use (ICAS Papers) I**NSW Syllabus** NS5.1.1

index (notation)

number symbol

Explanation representing an index as a superscript number

Alternate**Earliest Use (ICAS Papers)** I**NSW Syllabus** NS4.1

indices number noun

Explanation plural of index

Alternate

Earliest Use (ICAS Papers) I

NSW Syllabus NS5.1.1

inequality algebra noun

Explanation an expression which relates two expressions using a greater than or less than symbol (or greater than or equal to symbol etc)

Alternate

Earliest Use (ICAS Papers) I

NSW Syllabus PAS4.4

inequation algebra noun

Explanation a synonym for 'inequality'

Alternate

Earliest Use (ICAS Papers) G

NSW Syllabus see inequality

integer number noun

Explanation any member of the set of numbers that includes zero, the positive counting numbers and the negative counting numbers

Alternate

Earliest Use (ICAS Papers) G

NSW Syllabus NS4.2

interest (financial) measurement noun

Explanation a fee paid by a borrower related to the amount of money borrowed and the length of time it has been borrowed for

Alternate

Earliest Use (ICAS Papers) F

NSW Syllabus NS5.1.2

interest rate

measurement noun

Explanation the stated proportion of interest over time**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** NS5.1.2

intersecting (lines)

geometry adjective

Explanation lines that cross each other so that a point on one line is also a point on the other line**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** SGS3.2b

inverse proportion

number noun

Explanation where a quantity y is proportional to a quantity $1/x$ **Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** -

irrational number

number noun

Explanation a number that cannot be expressed as a fraction of integers or as a recurring decimal**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** NS5.3.1

isometric grid

space noun

Explanation a grid made up of equilateral triangles**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** SGS4.1

isometric view

space

noun

Explanation a method for representing three-dimensions in a drawing, vertical lines are shown as vertical lines and lines at 90 degree to the vertical in three-dimensions are shown as oblique lines at an angle of 120 degrees

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** SGS4.1

isosceles

space

adjective

Explanation having the same length

Alternate**Earliest Use (ICAS Papers)** E**NSW Syllabus** SGS3.2a

isosceles triangle

space

noun

Explanation a triangle where at least two sides have the same length

Alternate**Earliest Use (ICAS Papers)** E**NSW Syllabus** SGS3.2a

key

data

noun

Explanation a part of a diagram that shows how colours and symbols relate to particular words

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** DS3.1

kilogram

measurement noun

Explanation SI unit of mass, 1 thousand grams

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** MS2.4

kilolitre

measurement noun

Explanation one thousand litres**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** MS4.2

kite

space noun

Explanation a quadrilateral with two adjacent sides of length x and two adjacent sides of length y , where x and y can be equal**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS4.3

latitude

measurement noun

Explanation a figure used to locate a point on the Earth's surface by specifying the angle north or south from the equator**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** Additional Cont

leap year

measurement noun

Explanation a year with 366 days, which typically occur every four years**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

length

measurement noun

Explanation a distance between two points**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MES1.1

less than or equal to symbol

number

symbol

Explanation a symbol showing the relation that one quantity is less than another or equal to it

Alternate

Earliest Use (ICAS Papers) F

NSW Syllabus PAS4.4

less than symbol <

number

symbol

Explanation a symbol showing the relation that one quantity is less than another

Alternate

Earliest Use (ICAS Papers) F

NSW Syllabus NS2.1

likely

chance

adjective

Explanation a word describing a probability that is greater than 0.5

Alternate also used to indicate a probability in general

Earliest Use (ICAS Papers) A

NSW Syllabus NS1.5

line graph

data

noun

Explanation a graph where data points are connected by lines, suggesting intermediate values or trends

Alternate

Earliest Use (ICAS Papers) D

NSW Syllabus DS3.1

line of reflection

space

noun

Explanation a line about which a shape can be reflected

Alternate

Earliest Use (ICAS Papers) D

NSW Syllabus -

line of symmetry

space noun

Explanation a line that splits a shape into two congruent parts, where each part is a reflection of the other

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus SGS1.2

litre

measurement noun

Explanation a decimal (but not SI) unit of capacity

Alternate

Earliest Use (ICAS Papers) B

NSW Syllabus MS2.3

logarithm

number number

Explanation a function that is the inverse of raising to the power of, for example because 10 squared is 100 the base 10 logarithm of 100 is 2

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus PAS5.3.8

logarithmic

number adjective

Explanation related to logarithms

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus PAS5.3.8

logarithmic scale

data noun

Explanation a scale where intervals of equal length represent increasing powers of a number, for example a scale where the space between 10 and 100 is the same as the space between 100 and 1000

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus -

longitude

measurement noun

Explanation a figure used to locate a point on the Earth's surface by specifying the angle east or west from the Greenwich meridian

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** Additional Cont

mapping

algebra noun

Explanation a synonym for function

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** -

mapping symbol (arrow)

algebra symbol

Explanation a symbol showing a functional relationship

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** -

mass

measurement noun

Explanation a fundamental measurement of the quantity of matter

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** MES1.4

mean

data noun

Explanation the arithmetic mean or 'average'

Alternate any member of a set of statistical measures that includes the geometric mean and the harmonic mean

Earliest Use (ICAS Papers) E**NSW Syllabus** DS3.1

measure

measurement noun

Explanation a quantity of something or some property**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

measure

measurement verb

Explanation the act of measuring**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MS1.1

median

data noun

Explanation the central value of a set of ordered data**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** DS4.2

metre

measurement noun

Explanation the SI unit of length**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MS1.1

midnight

measurement noun

Explanation the start of a calendar day**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** -

millilitre measurement noun

Explanation one thousandth of a litre, equivalent to one cubic centimetre

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus MS2.3

millimetre measurement noun

Explanation one thousandth of a metre

Alternate

Earliest Use (ICAS Papers) B

NSW Syllabus MS2.1

minus number verb

Explanation to subtract

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus NS1.2

minute measurement noun

Explanation 60 seconds

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus MS1.5

mode data noun

Explanation the largest category in a set of data

Alternate

Earliest Use (ICAS Papers) E

NSW Syllabus DS4.2

month

measurement noun

Explanation a measurement of time approximately equal to 30 days but which varies depending on the specific month

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** MS1.5

multiple

number noun

Explanation a number produced by multiplying one integer by another

Alternate**Earliest Use (ICAS Papers)** C**NSW Syllabus** -

multiplication symbol X

number symbol

Explanation a symbol representing multiplication

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.3

multiply

number verb

Explanation to do a multiplication

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** NS2.3

negative

number adjective

Explanation indicating a value less than zero

Alternate**Earliest Use (ICAS Papers)** E**NSW Syllabus** NS3.1

negative correlation

data noun

Explanation a relation between two sets of data such that as one increases the other decreases**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** -

negative number

number noun

Explanation a number whose value is less than zero**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** NS3.1

net

space noun

Explanation a 2D figure made of polygons that can be folded to make a polyhedron**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS2.1

network

space noun

Explanation a diagram that shows interconnections between things by joining nodes with lines**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** Additional Cont

nonagon

space noun

Explanation a nine sided polygon**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

non-convex

space

adjective

Explanation a synonym for concave

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus SGS4.1

noon

measurement noun

Explanation 12:00 pm - the middle of the day

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus -

North

space

noun

Explanation A main compass direction

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus SGS2.3

North-east

space

noun

Explanation A direction halfway between north and east

Alternate

Earliest Use (ICAS Papers) C

NSW Syllabus SGS2.3

North-west

space

noun

Explanation A direction halfway between north and west

Alternate

Earliest Use (ICAS Papers) C

NSW Syllabus SGS2.3

not to scale

space

phrase

Explanation a phrase that indicates that the measurements in the diagram are not reliable and should not be used to answer the question

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** -

not-equals symbol

number

symbol

Explanation a symbol indicating to values are not the same

Alternate**Earliest Use (ICAS Papers)** F**NSW Syllabus** -

number pattern

algebra

noun

Explanation a set of numbers that follow some rule

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.1

number sentence

number

noun

Explanation a valid expression using numbers and an equal sign (or greater than or less than symbol)

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** PAS2.1

numeral

number

noun

Explanation a symbol or word that indicates a number

Alternate**Earliest Use (ICAS Papers)** D**NSW Syllabus** NS3.1

numerator number noun

Explanation the number that appears on top in the common notation for fractions

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus NS3.4

oblique (line) space adjective

Explanation a line not at right angles, either to another line or to some nominal horizontal/vertical

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus -

oblique view space noun

Explanation a form of 3D diagram in which one face is drawn front on and other faces are shown with oblique lines, often 30 degrees or 45 degrees

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus -

obtuse angle geometry noun

Explanation an angle between 90 and 180 degrees

Alternate

Earliest Use (ICAS Papers) E

NSW Syllabus SGS3.2b

octagon space noun

Explanation an eight sided polygon

Alternate

Earliest Use (ICAS Papers) E

NSW Syllabus SGS2.2a

odd (number)

number

adjective

Explanation a whole number that is not a multiple of 2**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.3

of sides (for a square or cube)

measurement phrase

Explanation referring to the length of side of an equilateral object i.e. where all the sides are the same length**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** -

origin

data

noun

Explanation a point from which distances are measured, specifically for co-ordinates**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS4.5

Origin as an O

data

symbol

Explanation a symbol on a graph indicating the origin, coordinates (0,0)**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS4.5

outcome

chance

noun

Explanation an event**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** NS4.4

parallel

geometry adjective

Explanation lines or planes are parallel when they are a fixed distance apart**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS1.2

pattern

algebra noun

Explanation a collection of shapes or numbers that change in some predictable way, such as repetition**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.1

pentagon

space noun

Explanation a five sided polygon**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS2.2a

percent

number adjective

Explanation out of 100**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** NS2.4

percent of

number phrase

Explanation a fraction out of 100 of some quantity**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** -

percent off

number

phrase

Explanation a percentage of a quantity has been subtracted**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** -

percent symbol %

number

symbol

Explanation a symbol denoting a fraction out of 100**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** NS2.4

percentage

number

noun

Explanation proportions expressed as fractions of 100**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** NS2.4

percentage of

number

noun

Explanation the fraction out 100 of a quantity**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** NS4.3

perimeter

measurement noun

Explanation the length of a curve or set of lines enclosing a region**Alternate****Earliest Use (ICAS Papers)** B**NSW Syllabus** MS2.1

permutation

data

noun

Explanation the number of ways of picking n things from a collection of m things with respect to the order in which they are picked

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** -

perpendicular

geometry

adjective

Explanation at rights angles to

Alternate**Earliest Use (ICAS Papers)** E**NSW Syllabus** SGS2.2b

perspective

space

adjective

Explanation a quality of drawings of three dimensions by which parallel lines appear to converge towards points in the distance

Alternate**Earliest Use (ICAS Papers)** E**NSW Syllabus** SGS3.1

pi

geometry

noun

Explanation the value found when the circumference of a circle is divided by its diameter

Alternate**Earliest Use (ICAS Papers)** F**NSW Syllabus** MS4.1

pictogram

data

noun

Explanation a synonym for picture graph: a kind of diagram in which values for a category are shown by pictures representing values

Alternate**Earliest Use (ICAS Papers)** C**NSW Syllabus** see picture grap

picture graph

data noun

Explanation a kind of diagram in which values for a category are shown by pictures representing values

Alternate**Earliest Use (ICAS Papers)** C**NSW Syllabus** DS2.1

pie chart

data noun

Explanation a synonym for pie graph

Alternate**Earliest Use (ICAS Papers)** D**NSW Syllabus** see sector graph

pie graph

data noun

Explanation a diagram where the proportions of a set of categories are represented by sectors in a circle: see sector graph

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** see sector graph

plane section

space noun

Explanation the shape formed by a section

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** -

plus

number preposition

Explanation perform an addition, find a total of two (or more) numbers

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.2

pm

measurement noun

Explanation times after and including 12 noon up to (but not including 12 midnight)

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus MS3.5

polygon

space noun

Explanation a closed simple shape consisting of straight lines joining vertices

Alternate

Earliest Use (ICAS Papers) E

NSW Syllabus SGS2.2a

polyhedra

space noun

Explanation the plural of polyhedron

Alternate

Earliest Use (ICAS Papers) G

NSW Syllabus SGS4.1

polyhedron

space noun

Explanation a three dimensional shape whose faces are all polygons

Alternate

Earliest Use (ICAS Papers) G

NSW Syllabus SGS4.1

positive

number adjective

Explanation greater than zero

Alternate

Earliest Use (ICAS Papers) E

NSW Syllabus NS4.2

positive correlation

data noun

Explanation a relation between two sets of data such that as one increases the other also increases

Alternate**Earliest Use (ICAS Papers)** G**NSW Syllabus** -

positive number

number noun

Explanation a number greater than zero

Alternate**Earliest Use (ICAS Papers)** E**NSW Syllabus** NS4.2

powers

number noun

Explanation the result obtained after multiplying a number by itself a set number of times

Alternate sometimes the number of times a number has been multiplied by itself i.e. the index

Earliest Use (ICAS Papers) G**NSW Syllabus** NS5.1.1

prism

space noun

Explanation a polyhedron that has two faces which are congruent polygons which are parallel, and typically aligned with each other

Alternate**Earliest Use (ICAS Papers)** C**NSW Syllabus** SGS1.1

probability

chance noun

Explanation a term that designates the extent to which an event may occur

Alternate**Earliest Use (ICAS Papers)** F**NSW Syllabus** NS4.4

product

number noun

Explanation the result obtained after multiplying two or more numbers together**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** NS2.3

pronomeral

algebra noun

Explanation a term sometimes used to name letters used in algebra to stand in place of a number**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** PAS4.1

proportion

number noun

Explanation the ratio of one term to another or the relationship between two quantities as that ratio**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** NS3.4

pyramid

space noun

Explanation a polyhedron formed from a polygon and lines that join each vertex of the polygon (the base) with a point on a different plane (the apex)**Alternate****Earliest Use (ICAS Papers)** B**NSW Syllabus** SGS2.1

Pythagoras' theorem

measurement noun

Explanation a theorem that relates the lengths of the sides of a right angle triangle as the sum of the squares of the two shorter sides equalling the square of the longest side**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** MS4.1

quadrant

geometry noun

Explanation a region consisting of a quarter of a circle**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** SGS3.2a

quadratic

algebra adjective

Explanation an expression where a term is raised to the power of 2**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** PAS5.2.2

quadrilateral

space noun

Explanation a polygon with four sides**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS2.2a

quantity

number noun

Explanation an amount of something expressed as a number**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** -

quarter

number noun

Explanation one part of a value or object split into four equal pieces**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.4

quarter turn

space

noun

Explanation 90 degrees**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** -

radians

geometry

noun

Explanation a measure of angle where a full turn is 2 pi radians**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

radii

geometry

noun

Explanation a plural form of radius**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** MS4.1

radius

geometry

noun

Explanation the distance from the centre of a circle to its edge**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS3.2a

raised to the power of

number

noun

Explanation multiplied by itself a set number of times**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** NS5.3.1

random

chance

adjective

Explanation without following an order or pattern, usually implying equally likely outcomes**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** NS5.1.3

randomly

chance

adverb

Explanation in a random way**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** NS2.5

range

algebra

noun

Explanation the set of values that a function maps to**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

range

data

noun

Explanation the difference between the highest and lowest value in a set of data**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** DS4.2

rate

number

noun

Explanation a value produced by measuring one quantity against another, typically against time**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** NS4.3

ratio

number

noun

Explanation a comparison of two quantities**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** NS4.3

ratio symbol :

number

symbol

Explanation a symbol used to show a ratio where the numbers either side of the symbol are the relative proportions**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** NS4.3

rational number

number

noun

Explanation a number that can be expressed as a fraction of two integers**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** NS5.3.1

real number

number

noun

Explanation any number that can be shown by a position on a number line**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** NS5.3.1

rectangle

space

noun

Explanation a quadrilateral with four internal right angles**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGES1.2

rectangular coordinates

data

noun

Explanation coordinates given as positions on two number lines at right angles to each other. Generally only used to contrast with other coordinate systems such as polar coordinates

Alternate**Earliest Use (ICAS Papers)** G**NSW Syllabus** -

rectangular prism

space

noun

Explanation a prism with a rectangular cross section

Alternate**Earliest Use (ICAS Papers)** B**NSW Syllabus** SGS3.1

reflect

space

verb

Explanation to do a reflection

Alternate**Earliest Use (ICAS Papers)** D**NSW Syllabus** -

reflection

space

noun

Explanation a transformation across a line (2D) or plane (3D) that reverses positions relative to the line/plane

Alternate**Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS4.4

reflex angle

geometry

noun

Explanation an angle greater than 180 degrees

Alternate**Earliest Use (ICAS Papers)** E**NSW Syllabus** SGS3.2b

relationship

algebra noun

Explanation a rule or information that connects two mathematical objects or quantities**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS4.5

relative frequency

data noun

Explanation the frequency of a category divided by the total of all the relevant categories**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** NS5.1.3

remainder

number noun

Explanation the whole number left over after one number has been divided into another a whole number of times**Alternate****Earliest Use (ICAS Papers)** B**NSW Syllabus** NS2.3

rhombus

space noun

Explanation a parallelogram with sides of equal length**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS1.2

right-angle

geometry noun

Explanation a 90 degree angle**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS2.2a

right-angle triangle

space

noun

Explanation a triangle with one internal right angle**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS3.2a

root (in general)

number

noun

Explanation a solution to an equation that involves indices, specifically the number that would be repeatedly multiplied to give the given value in the equation**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS5.3.2

rotate

space

verb

Explanation to turn about a point (2D) or a line (3D)**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** SGS1.2

round (a number)

number

verb

Explanation to approximate a number to a given degree of accuracy**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** NS2.4

round to the nearest...

number

verb

Explanation to write a number of a given accuracy that is closest to the given number**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** NS1.2

rounding

number noun

Explanation the process of making approximating a number to a given accuracy**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** NS1.1

rule

algebra noun

Explanation a mathematical description that changes one mathematical object into another one by some predefined system**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** PAS2.1

ruler

measurement noun

Explanation a device for measuring lengths by comparing a length to a pre-marked linear scale**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MS1.1

scale

data noun

Explanation a line or ratio indicating the relative size of a map or diagram against the size it is meant to represent**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** DS3.1

scale (general)

measurement noun

Explanation the proportion of one measurement compared to another**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** DS3.1

scale drawing

space

noun

Explanation a drawing of a real object, or area in which angles are correct and lengths are in proportion to real lengths

Alternate**Earliest Use (ICAS Papers)** D**NSW Syllabus** MS3.2

scale factor

space

noun

Explanation the value by which lengths have been multiplied in an enlargement

Alternate**Earliest Use (ICAS Papers)** F**NSW Syllabus** SGS4.4

scalene triangle

space

noun

Explanation a triangle where no sides are equal and/or no angles are equal

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** SGS3.2a

scatter diagram

data

noun

Explanation see scatter graph

Alternate**Earliest Use (ICAS Papers)** X**NSW Syllabus** DS4.2

scatter graph

data

noun

Explanation a graph which shows two sets for one object as coordinates

Alternate**Earliest Use (ICAS Papers)** G**NSW Syllabus** see scatter diagr

scatter plot

data

noun

Explanation a synonym for scatter graph**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** see scatter diagr

scattergram

data

noun

Explanation a synonym for scatter graph**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** see scatter diagr

scientific notation

number

noun

Explanation a way of representing large or smaller numbers as an integer between 1 and 10 and as a power of ten**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** NS5.1.1

second

measurement noun

Explanation the SI unit of time, equivalent to one sixtieth of a minute**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MS1.5

second

number

adjective

Explanation an ordinal number indicating coming after the first object in order**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** -

section (of solid)

space

noun

Explanation the intersection of a plane and a three dimensional shape**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** SGS2.1

sector (of circle)

geometry

noun

Explanation a region defined by part of the circumference of a circle (an arc) and two lines that meet at the centre of the circle**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** SGS3.2a

sector graph

data

noun

Explanation another name for a pie graph**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** DS3.1

segment (of circle)

geometry

noun

Explanation a region defined by part of the circumference of a circle (an arc) and a line**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** MS5.3.2

semi-circle

geometry

noun

Explanation half a circle**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** SGS3.2a

shape

space noun

Explanation a visual form usually referring to a two-dimensional figure**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MES1.2

side view

space noun

Explanation a two-dimensional view of a three-dimensional object looked at from one side**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGES1.1

sides (of a shape)

space noun

Explanation for a two-dimensional shape the edges of the shape, and for a three-dimensional shape the faces or edges**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS1.2

similar

geometry noun

Explanation two shapes are similar when one shape can be produced by a uniform enlargement of the other. Angles stay the same size with similar shapes**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** SGS4.4

simultaneous equation

algebra noun

Explanation a set of equations with the same unknowns**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** PAS5.2.2

size measurement noun

Explanation a term used to refer to the quantity of a given measure, usually length or mass

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus NES1.1

slide space noun

Explanation a term used to describe a translation

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus SGS1.2

solid space noun

Explanation a three dimensional object

Alternate a three dimensional object that is not hollow

Earliest Use (ICAS Papers) A

NSW Syllabus SGS2.1

solve algebra noun

Explanation find the value of an unknown quantity

Alternate

Earliest Use (ICAS Papers) F

NSW Syllabus PAS4.4

South space noun

Explanation a direction 180 degrees from North

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus SGS2.3

South-east

space noun

Explanation a direction 45 degrees clockwise from East**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** SGS2.3

South-west

space noun

Explanation a direction 45 degrees clockwise from South**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** SGS2.3

speed

measurement noun

Explanation a rate comparing distance and time**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** MS3.1

sphere

space noun

Explanation a closed three-dimensional surface where every point of the surface is the same distance from the centre**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS1.1

spinner

chance noun

Explanation a flat object with marked regions which can either be spun or has an arrow that can be spun, so that the region indicated is a random event**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** NS2.5

spread

data

noun

Explanation the extent to which data varies within a data set**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** DS5.2.1

spreadsheet

data

noun

Explanation a software application that uses columns, rows and cells to organise data**Alternate****Earliest Use (ICAS Papers)** C**NSW Syllabus** DS3.1

square

space

noun

Explanation a rectangle with all sides the same length**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** SGES1.2

square (operation)

number

verb

Explanation to multiply a number by itself**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** NS4.1

square as superscript 2

number

symbol

Explanation a symbol that indicates a number is to be squared**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** NS4.1

square number

number noun

Explanation a whole number that is the square of another whole number**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** NS4.1

square root

number noun

Explanation a number that when multiplied by itself gives the given number**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** NS4.1

square root symbol

number symbol

Explanation a symbol that indicates that the value is the square root of the number in the symbol**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** NS4.1

stem and leaf plot

data noun

Explanation a diagram that shows actual data values for numerical data within intervals**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** DS4.1

subtract

number verb

Explanation to find the difference of one number from another number**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NES1.2

subtraction

number

noun

Explanation the process of subtracting**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NES1.2

subtraction symbol -

number

symbol

Explanation a symbol that indicates subtraction**Alternate** the symbol also indicates that a number is negative**Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.2

sum

number

noun

Explanation the total of two quantities**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** -

surd

number

noun

Explanation a number expressed with irrational values shown as roots**Alternate****Earliest Use (ICAS Papers)** I**NSW Syllabus** NS5.3.1

surface area

measurement noun

Explanation the total area of the faces/surfaces of a three-dimensional object**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** MS3.2

take away

number

verb

Explanation to subtract**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.2

tally

data

verb

Explanation a way of recording a count by making vertical strokes, grouped together into fives by a cross stroke**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** DS1.1

tally mark

data

noun

Explanation a mark used in a tally**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** DS1.1

tessellate

space

verb

Explanation to fit together copies of a shape so as to leave no gaps and with no overlaps, in such a way that an indefinite number of copies of the shape could be fitted together**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS1.2

third (fraction)

number

noun

Explanation one of three equal parts**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** -

three-dimensions 3D

space noun

Explanation having width, depth and height**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** -

three-figure bearing

measurement noun

Explanation a way of showing direction by giving an angle clockwise from North as a three-digit number (including leading zeroes). Often accompanied by a distance to indicate a specific position**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** MS5.2.3

time zone

measurement noun

Explanation a geographical region in which the time of day is measured against the same zero point of midnight. Typically a set number of hours before or after UTC (GMT)**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** MS3.5

timeline

data noun

Explanation a line which represents an interval of time, on which events can be marked**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** MS2.5

times

number verb

Explanation a synonym for multiplication**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** PAS2.1

times table

number noun

Explanation a table of numbers showing the result of multiplication**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** PAS2.1

timetable

data noun

Explanation a table showing the times of set events, typically arrival and departure times of transport**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MS2.5

tonnes

measurement noun

Explanation one thousand kilograms**Alternate****Earliest Use (ICAS Papers)** E**NSW Syllabus** MS3.4

top view

space noun

Explanation a two dimensional view of a three dimensional object looked at from above**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS2.1

translate

space verb

Explanation to move a shape along a straight line without changing its orientation or size**Alternate****Earliest Use (ICAS Papers)** G**NSW Syllabus** -

translation space noun

Explanation a way of moving a shape without changing its orientation or size

Alternate

Earliest Use (ICAS Papers) G

NSW Syllabus SGS4.4

trapezium space noun

Explanation a quadrilateral where exactly one pair of sides are parallel

Alternate a quadrilateral where at least one pair of sides are parallel

Earliest Use (ICAS Papers) F

NSW Syllabus SGS1.2

trapezoid space noun

Explanation used in the US as the equivalent of UK trapezium

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus -

tree diagram chance noun

Explanation a diagram which shows branching events

Alternate

Earliest Use (ICAS Papers) X

NSW Syllabus NS5.3.2

triangle space noun

Explanation a three sided polygon

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus SGES1.2

trundle wheel

measurement noun

Explanation a device used for measuring distances by using the turns of a wheel of known size**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** MS2.1

turn

space verb

Explanation to rotate**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS1.2

twelve hour time (12-hour time)

measurement phrase

Explanation a way of counting hours in groups of 12 starting at midnight and noon**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** see am/pm notat

Twenty four (24-) hour clock

measurement phrase

Explanation a synonym for twenty four hour time or a clock that shows time in 24 hour intervals**Alternate****Earliest Use (ICAS Papers)** B**NSW Syllabus** -

Twenty four (24-) hour time

measurement phrase

Explanation a way of counting hours in a day starting from 0 at midnight through to 24 at the next midnight**Alternate****Earliest Use (ICAS Papers)** B**NSW Syllabus** -

two-dimensions 2D

space noun

Explanation having width and height but not depth**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** -

two-way table

data noun

Explanation a table that has two dimensions of categories and so has several rows and columns**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** DS2.1

unit fraction

number noun

Explanation a fraction where one is the numerator**Alternate****Earliest Use (ICAS Papers)** X**NSW Syllabus** (NS3.4)

units (of measurement)

measurement noun

Explanation a standard size by which a measure can be counted**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** MS1.1

units (place value)

number noun

Explanation that part of a number that is between 0 and 10 (in base 10)**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS2.1

unknown (algebraic)

algebra noun

Explanation a quantity whose value is not known and is represented by a letter or symbol**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS4.1

unlikely

chance adjective

Explanation having a low probability**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** NS1.5

value

number noun

Explanation a quality expressed as a number**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** -

variable

algebra noun

Explanation a symbol or expression that can be any one of a range of values**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS4.1

Venn diagram

data noun

Explanation a diagram that shows the sets and subsets as regions enclosed in curves**Alternate****Earliest Use (ICAS Papers)** D**NSW Syllabus** Additional Cont

vertex

geometry noun

Explanation a point where two lines meet**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** SGS1.1

vertical

space adjective

Explanation at right angles to horizontal**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS1.2

vertices

geometry noun

Explanation the plural of vertex**Alternate****Earliest Use (ICAS Papers)** F**NSW Syllabus** SGS1.1

view

space noun

Explanation a representation of an object from a given position**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** SGS2.1

volume

measurement noun

Explanation the amount of three dimensional space taken up by a shape**Alternate****Earliest Use (ICAS Papers)** A**NSW Syllabus** MES1.3

week

measurement noun

Explanation seven days

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus MES1.5

West

space noun

Explanation a direction 90 degree clockwise from South

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus SGS2.3

whole number

number noun

Explanation any non-negative integer

Alternate sometimes a synonym for integer and sometimes a synonym for positive integer

Earliest Use (ICAS Papers) A

NSW Syllabus NES1.1

width

measurement noun

Explanation a typically horizontal length

Alternate

Earliest Use (ICAS Papers) A

NSW Syllabus MS3.2

x-axis

algebra noun

Explanation a horizontal axis on a graph showing a relationship between a variable called 'x' and another variable (typically 'y')

Alternate

Earliest Use (ICAS Papers) F

NSW Syllabus PAS4.5

y-axis

algebra

noun

Explanation a vertical axis on a graph showing a relationship between a variable called 'y' and another variable (typically 'x')

Alternate**Earliest Use (ICAS Papers)** F**NSW Syllabus** PAS4.5

year

measurement noun

Explanation a unit of time based on the time it takes a planet (normally Earth) to revolve around the Sun.

Alternate**Earliest Use (ICAS Papers)** A**NSW Syllabus** MS1.5