DICTIONARY OF
MATHEMATICS

MATEMATiK TERiMLERi
SOZLUGU

ENG-TUR
TUR-ENG

M.SAID TOPKAYA

Thank you for your help

Mehmet Agpak and Abuzer Alaca

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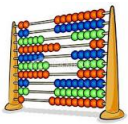
m.saidtopkaya@gmail.com
magpak@windowslive.com

DICTIONARY OF
MATHEMATICS

CHAPTER I
ENGLISH-TURKISH

A

abacus: /æbəkəs/ *n.* frame holding bars strung with beads which are used to make mathematical calculations. ***see also*** *soroban and calculator.*



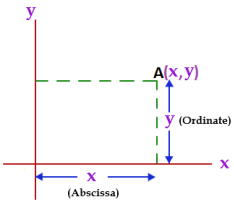
abaküs, sayı boncuğu

* Could the Ancient Greeks use an abacus?

abbreviation: /əbri:vieıʃən/ *n.* a shortened or contracted form of a word or something.

kısaltma

* Cos is a mathematical abbreviation. It means cosine.



abscissa: /æbsısə/ *n.* This is also known as the "x" coordinate in a cartesian system, horizontal line. ***see also*** *ordinate.*

apsis

* I plotted (3,7), (3,2) and (3,-8), all having the same abscissa, 3.

absolute value: /æbsəlu:t-vælju:/ *n.* value of a number expressed as a positive number. ***same meaning*** *modulus*.

mutlak değer, modül

* -5 is at 5 units distance from the origin so the absolute value of -5 is 5.

abstract: /æbstrækt/ *adj.* existing as an idea, feeling or quality, not as a material object. ***see also*** *concrete.*

soyut

* Pure mathematics studies entirely abstract concepts.

abstraction: /æbstrækʃən/ *n.* The process of making a general statement which summarizes what can be observed in particular instances.

soyutlama

*Mathematical theorems are essentially abstraction of concepts to a higher level.

acceleration: /əkseləreıʃn/ *n.* when something goes faster, or its ability to do this. ***see also*** *velocity, time, distance, displacement.*

ivme

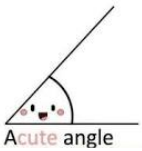
* If we know the inital and final velocity of the car and the time used, the average acceleration can be calculated.

accuracy: /ækjʊrəsi/ *n.* being exact or correct. ***see also*** *precision.*
doğruluk
* Meteorological instruments is to have high accuracy and also have high precision.

acre: /eıkər/ *n.* a unit for measuring area (4047 m²).
acre
* This playing field for boys of almost 14 acres.

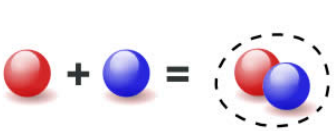
actual value: /æktʃuəl-vælju:/ *n.* is a value that real or certain.
kesin değer
* It is impossible to get actual value of pi because it is a transcendental number.

acute angle: /əkju:t-æŋgl/ *n.* an angle less than 90˚. ***see also*** *right angle, obtuse angle.*



dar açı
* How many degrees are acute angle?

acute triangle: /əkju:t-traıæŋgl/ *n.* a triangle that has all angles less than 90˚. ***see also*** *right triangle, obtuse triangle.*
dar açılı üçgen
* Which of the following figures is an acute triangle?



add: /æd/ *v.* bring two or more numbers or things together make a new total.
eklemek, toplamak
* Add a positive integer by moving to the right on the number line.

addend: /ədend/ *adj.* any of the numbers that are added together.
toplanan
* "13+....=29" subtract 13 from 29 to find the missing addend. So it is 16.

addition: /ədıʃn/ *n.* basic mathematical operation in which separate numbers are brought together into one total sum. ***see also*** *subtraction, multiplication, division.*
toplama işlemi
* Block diagrams can help us to visualize the addition word problems.

additive identitiy : /ædətıv - aıdentəti/ *n.* identitiy of addition, zero. ***see also*** *multiplicative identity.*
toplamada birim eleman

* “5 + 0 = 0 + 5 = 5” here 0 is the additive identity element.

additive inverse: /ædətɪv-ɪnvɜːs/ n. inverse number of addition, the negative of number. ***see also*** *multiplicative inverse.*

toplamada ters eleman

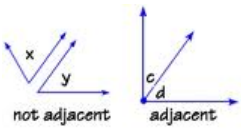
* The additive inverse of a is denoted “-a”.

adjacent: /ədʒeɪsənt/ *adj.* very near, next to, or touching.

bitişik, komşu (trigonometri, geometri)

* Right triangle’s side’s names are hypotenuse, adjacent and opposite sides.

adjacent angles: /ədʒeɪsənt-æŋglz/ angles are adjasent if they have a common side and commen vertex, and don’t overlap.



komşu açılar

* If sum of both angles is 90°, it is called “adjacent complementery angles”. but the sum is equal to 180°, it is also called “adjacent suplementery angles”.

adjoint: /ədʒɔɪnt/ *n.* the matrix formed by taking the transpose of the cofactor matrix of a given original matrix. ***abbr*** *adj.*

adjoint, ek matris

* To calculate adjoint of matrix, just put the elements in rows to columns in the cofactor matrix.

algebra: /ældʒəbrə/ *n.* a part of mathematics in which signs and letters represent numbers.

cebir

* The word “algebra” comes to us from a Latin translation of the title of al-Khwarizmi’s book. Its short name is “al-jabr w’al-muqabala”.

algebraic number: /ældʒəbreɪk-nʌmbər/ any number that is a root of a non-zero polynomial with rational coefficent. ***see also*** *transcendental number.*

cebirsel sayı.

* $\sqrt{2}$ is the solution to $x^2-2=0$, therefore it is algebraic number.

algorithm: /ælgərɪðm/ *n.* a set of mathematical instructions that step-by-step procedure used to solve a problem.

algoritma

* A translation of al-Khwarizmi’s name itself gives us the word “algorithm”.

aliquant: /ælɪkwɑnt/*adj***.** a number or expression which is not an exact

divisor of a given number or expression. ***see also*** *aliquot.*

tümbölmeyen, kalanlı bölen

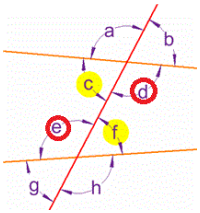
* 2 is an aliquant part of any odd number.

aliquot: /ælɪkwɑːt/ *adj.* a number or expression which is an exact divisor of a given number or expression, and is usually required to be a proper divisor. ***see also*** *aliquant.*

tümbölen, kalansız bölen.

* $x + 1$ is an aliquot part of $x^2 - 1$.

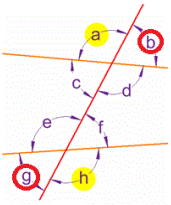
alternate interior angles: /ɑːltəneɪt-ɪntɪəriər-æŋglz/ *n.* when two lines are crossed, the pairs of angles on opposite side of transversal but inside the two lines. ***see also*** *alternate exterior angles. corresponding angles, consecutive interior angles*.



iç ters açılar

* Alternate interior angles is by using "z" or "inverse z" pattern.

alternate exterior angles: /ɑːltəneɪtɪk-stɪəriər-æŋglz/ *n.* two lines are crossed, the pairs of angles on opposite side of transversal but outside the two lines. ***see also*** *alternate interior angles. corresponding angles, consecutive interior angles.*



dış ters açılar

* Alternate exterior angles is so important for you when you are working with a pair of parallel lines.

altitude: /ælтɪtjuːd/ **1.** *n.* height.

yükseklik

2. *n.* height above sea level.

rakım

* Altitude in math usually refer to heigh. We generally use for polygons.

amicable numbers: /æmɪkəbl-nʌmbərz/ n. a pair of numbers with the property that each is equal to the sum of the positive divisors of the other.

bağdaşık sayılar

* 220 and 284 are amicable numbers because the positive divisors of 220 are 1,
2, 4, 5, 10, 11, 20, 22, 44, 55 and 110, whose sum is 284, and the positive divisors of 284 are 1, 2, 4, 71 and 142, whose sum is 220.

amount: /əmaʊnt/ **1.** *n.* a number, quantity or sum.

miktar

2. *n.* a quantity of money.

tutar, meblağ
* USB memory sticks enable large amounts of data to be stored.

analyse: /ænəlaız/ *see* ***analyze.***

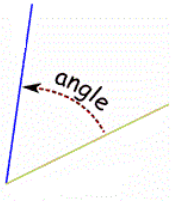
analyze: /ænəlaız/ *v.* to study or examine something in detail.
analiz etmek
* Let's analyze the Euclidean geometry.

analysis: /ənæləsıs/ **1.** *n.* the area of mathematics include those topics that involve the use of limiting processes.
analiz (ders)
2. *n.* when you analyse something.
analiz
* Analysis evolved from calculus.

analytic: /ænəlıtık/ *adj.* of analysis, of examination.
analitik, çözümsel
* Mathematicians have an analytic mind.

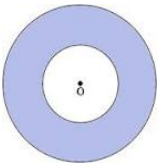
analytic geometry: /ænəlıtık-dʒiɑ:mətri/ n. is the study of geometry using a coordinate system and the principles of algebra and analysis.
analitik geometri
* Omar Khayyam saw a strong relationship between geometry and algebra, before analytic geometri.

angle: /æŋgl / *n.* space between two or more lines which are joined at a common point.



açı
* Reflex angle is an angle that is greater than 180°

annulus: /ænjʊləs/ *n.* a flat shape like a ring, its edges are two circles that have the same center. ***see also*** *torus.*

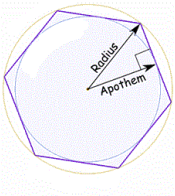


halka şeklinde, iki boyutlu halka
* An annulus is the Latin word. Its mean is "little ring".

anticlockwise: /æntiklɒkwaız/ *adj. adv.* moving in the opposite direction to hands on a clock. ***same meaning*** *counterclockwise*.
saat yönü tersi
* The direction of movement of the earth around the sun is anticlockwise.

antilogarithm: /æntilɒgərıðəm/ *n.* equal to the negative of logarithm of the number itself. ***same meaning*** *cologarithm.* ***abbr*** *antilog.*
kologaritma, ters logaritma
* If log (39.2) = 1.5933 then antilog(1.5933) = 39.2.

apex: /eɪpeks/ *n.* the point furthest from the base of an object. ***see also*** *base*.
tepe noktası, zirve
* Apex stand at the vertical axis.

apothem: /æpəθem/ *n.* the distance from the center of a regular polygon tothe midpoint of a side.


düzgün çokgende merkezden çekilen dikme.
* The apothem can be used to determine the area of the polygon.

applied mathematics: /əplaɪd-mæθəmætɪks/ *n.* it consist of mathematical techniques and results. that are typically used in science, engineering, business and industry.
uygulamalı matematik
* Mathematics of engineering, linear programming, probability and statistic, financial math, cryptography and combinatorics are the most definite branch in applied math.

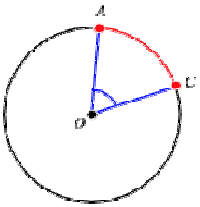
appropriate: /əproʊprieɪt/ *adj.* right or suited for some purpose or situation.
uygun
* We should use appropriate tools when solving a mathematical problem.

approximate: /əprɒksɪmət/ *adj.* not completely accurate but close.
yaklaşık
* $22/7$ and 3.14 are approximate values.

approximately: /əprɒksɪmətli/ *adv.* close to a particular number or time although not exactly that number or time.
yaklaşık olarak
* Pi is approximately equal to 3.14.

approximation: /əprɒksɪmeɪʃn/ *n.* a guess of a number that is not exact but that is close.
yaklaşım
* If the bus ride takes 57 minutes, you could say “A one hour bus ride.”, that would be an approximation.

arbitrary constant: /ɑːbɪtrəri-kɒnstnt/ *n.* a constant which any value or form may at will given.
keyfi sabit
* We dont use arbitrary constant in definite integral.

arc: /ɑːk/ **1.***n.* part of the circumference of a circle.

yay (geometri)

2. *pref.* it explains inverse trigonometric and inverse hyperbolic functions. ***such as*** *arccos, arctan, arccosec, arcsinh, arccoth, arcsech.*

arc-

* Arcs lie on the circumference of a circle.

are: /eər/ *n.* a unit for measuring area (100 m²).

ar

* This field's area is 135 ares.

area: /eəriə/ *n.* the size of a flat surface calculated by multiplying its length by its width.

alan

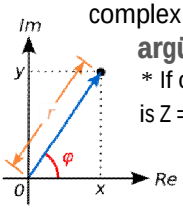
* The area of this shape is 16 square units.

argand diagram: /ɑ:gænd daıəgræm/ ***see*** *complex plane*

argument: /ɑ:gjumənt/ **1.** *n.* the independent variable of a function.

bağımsız değişken

2. *n.* is a function operating on complex numbers. ***abbr*** *arg.*



argüment

* If our complex number is $Z = 1+\sqrt{2}\,i$, $\arg(Z) = 60°$.

arithmetic: /ərıθmətık/ *n.* the part of mathematics that includes the adding and multiplying.

aritmetik

* Arithmetic includes most elementary topics. Such as fractions, exponents, operations.

arithmetic mean: /ərıθmətık-mi:n/ *n.* is the sum of numbers divided by the number of items in any set. ***see also*** *harmonic mean and geometric mean.*

aritmetik ortalama

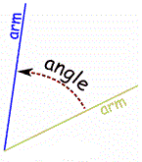
* The prices of cheese pizzza in five different pizza delivery shops are $6, $8 , $7.50, $9.50 and $8. Find the arithmetic mean of prices.

arithmetic sequence: /ərıθmətık-si:kwənts/ *n.* a sequence made by adding some value each time. ***see also*** *geometric sequence*.

aritmetik dizi

* The sequence of 5, 11, 17, 23, 29, 35 is an arithmetic sequence

arm: /ɑ:rm/ *n.* any of the two straight lines that form the angle.



kol (açı)

* Let's identify the arms of a given angle.

arrange: /əreındʒ/ *v.* to put in order, to organize.

düzenlemek, sıralamak
* How many different ways can you arrange the letters in the word "mathematics"?

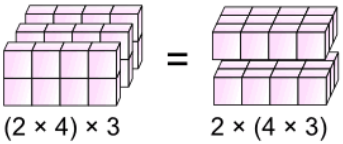
array: /əreɪ/ *v.* an ordered collection of elements, usually numbers.
sıralamak
* A multiplication array can easily be expressed as a repeated addition. Such as 7x5 = 7+7+7+7+7.

as likely as not: /æz-laɪkli-əz-nɑːt/ *adj. see* ***equally likely***

10 11 13 15 16 23 26

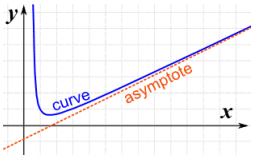
ascending order: /əsendɪŋ-ɔːrdər/ *adj.* arrenged from smallest to largest, increasing. ***see also*** *descending order.*
artan sıralama
* We can arrenge the decimals 3.60, 2.75 and 5.25 in ascending order with the help of number line.

associative law (property): /əsəʊʃɪtɪv-lɑː/ *adj.* pertaining to association, connective. in addition and multiplication. ***see also*** *comutative law, distributive law.*
birleşme özelliği
* The associative law of addition says that when we add more than two numbers to grouping of the addens does not change the sum.



assumption: /əsʌmpʃn/ *n.* something that you accept as true without question or proof. ***same meaning*** *hypothesis.*
varsayım, hipotez
* The philosophy behind all this is based on a number of assumptions.

asymmetry: /eɪsɪmətri/ *n.* lack of symmetry, lack of balance and proportion. ***see also*** *symmetry.*
asimetri
* When a figure is divided into twounequal halves, it is a case of asymmetry.



asymptote: /æsɪmptəʊt/ *n.* straight line approaching but never intercepts a curve.
asimptot
* Find the vertical asymptote of the graph of the function $\frac{x^2}{x-1}$ = y.

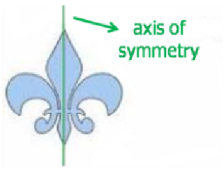
attribute: /ætrɪbjuːt/ *n.* is a characteriistic of an object or geometric shape.
nitelik
* Attribute talks about the shape, size, side or color.

average: /ævərɪdʒ/ *n.* a calculated central value of a set of numbers. ***same meaning*** *mean*.
ortalama
* The average high of students in Mr.Salma's class is 172.5 cm.

axes: /æksɪz/ *plural form of* ***axis.***

axiom: /æksiəm/ *n.* a statement or principle which is generally accepted to be true, but need not be so.
aksiyom, belit
* Here is an axiom. Let x and y be real numbers. Then x+y is a real number and x.y is also real number.

axis: /æksɪs/ *n.* reference line drawn on a graph.
eksen
* In a three dimensional coordinate plane; X, Y and Z are three axes.



axis of symmetry: /æksɪs-ʌv-sɪmətri/ *n.* a line through a shape so that each side is a mirror image.
simetri ekseni
* An axis of symmetry divides the figure into two symmetrical parts.

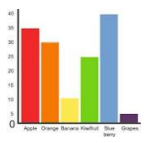
B

balance: /bælən*t*s/
1. *n.* a device used for weighing things.
terazi
2. *n.* a state where things are of equal weight or force
denge
3. *v.* make even weight.
dengelemek, tartmak.
* The weights on both pans are same, they are balanced.

balance scales: /bælən*t*s-skeɪəlz/ *n.* a device used for weighing things. ***same meaning*** *balance*, *beam balance, sclaes*.
terazi

* Balance scales are used to show that box "x" has a mass of 4 kg.

bar graph (chart): /bɑːr-grɑːf/ *n.* a graph drawn using rectangular bars, thin vertical or horizontal rectangles which have the same width but different heights or lengths. ***same meaning*** *column graph*.



sütun grafiği

* This bar graph below shows the grade of students in math exams .

bar notation: /bɑːr-nəʊteɪʃən/ *n.* the process of writing repeating decimals or repeating pattern of digits by using a bar is called bar notation.

devirli ondalık sayıların gösterim şekli

* Which of the following is the correct bar notation for the number 4,3333 ?

bars: /bɑːrs/ *n.* the absolute value notation. not paraentheses or brackets. *denoted by* "||".

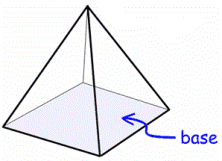
mutlak parantezi

* The absolute value bars do not work in the same way as do parantheses.

base: /beɪs/ **1.** *n.* the lowest surface or the bottom line of a shape. ***see also*** *apex.*

taban(şekil)

2. *n.* number system's name. ***see also*** *radix*.



taban (sayı sistemi)

3. *n.* the number that is going to be raised to a power in the exponents ***same meaning*** *radix*.

taban (üslü sayı)

* In 3^2, 3 is base. The factor 3 would repeat 2 times.

base ten system: /beɪs-ten-sɪstəm/ *n.* it is another name for the decimal system that we can use.

onluk sayı sistemi

* In base ten system, we use 10 digits. {0,1,2,3,4,5,6,7,8,9}

basic: /beɪsɪk/*adj.* necessary, essential for some process. ***same meaning*** *fundamental*.

temel

*Law of cosine is one of the basic formulas in trigonometry.

basis: /beɪsɪs/*n.* the most important facts, principle. ***see also*** *basic, fundamental.*

temel

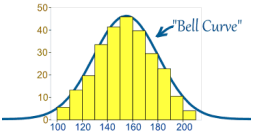
* Their proposals have no proven scientific basis.

beam balance: /biːm-bælən*ts*/ *n.* is another name of balance scales.

terazi.

* A triple beam balance used to measure accurate quantities of chemicals or drugs.

bell curve: /bel-kɜːv/ *n.* is a normal distribution curve and like a bell. ***see also*** *normal distribution.*



çan eğrisi

* Many of university use bell curve system for graduate.

bi: /baɪ-/ *pref.* meaning two.

iki

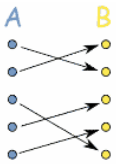
* A bicycle has two wheels.

big: /bɪg/ *adj.* large in size or amount. ***see also*** *large, small.*

büyük

*Pyramids in Egypt are big examples of solids. The oldest pyramid is 146 meters tall.

bijective: /baɪdʒektɪv/ *adj.* is a way of matching the members of a set. bijective means both injective and surjective. ***see also*** injective and surjective.



birebir örten

* There are no unpaired elements in bijective function.

billion: /bɪljən/ *n.* the number 1,000,000,000 .

milyar

* The standart form of “six billion, two hundred thousand, five hundred fifty” is 6,200,550.

binary: /baɪnəri/ *adj.* consisting of two parts.

ikili

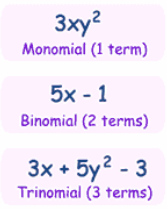
* binary numbers is expressed using 1 and 2 in computer system.

binary operation: /baɪnəri-ɑːpəreɪʃən/ *n.* is a calculation involing two elements of the set and producing another element of the set.

ikili işlem

* On the set of real numbers **R**, f(*a*,*b*) = *a* + *b* is a binary operation since the sum of two real numbers is a real number.

binomial: /baɪnəʊmiəl/ *adj.* a polynomial with two terms. ***see also*** *monomial, trinomial, polynomial*.



iki terimli polinom

* 6x-3 is an example of

binomial. It contain each two terms that are not like terms.

binomial theorem: /baɪnəʊmiəl-θiːərəm/ ***n.*** the theorem that specifies the expansion of any power $(a + b)^m$. ***see also*** *pascal's triangle.*

binom teoremi

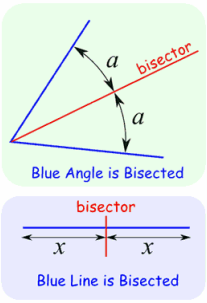
* Many of mathematicians believe that, Omar Khayyam used to binom theorem before Pascal.

bisect: /baɪsekt/ *v.* to divide into two equal parts.

ikiye ayırmak

* The red line bisects the blue line segment.

bisector: /baɪsektər/ *n.* a straight line that divides an angle or line into two equal parts.



açıortay

* What is the lenght of AB, If line is the segment bisector and AO=6 units?

bivariate: /baɪveəriət/ *adj.* data for two variables. ***see also*** *univariate.*

iki değişkenli

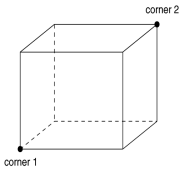
* We usually use bivariate data in 2-dimensional graph.

boundary: /baʊndəri/ *n.* a real or imagined line that marks the edge or limit of something. ***see also*** *perimeter.*

sınır, çevre

*The boundary of the field is given as 9 + 12 + 11 + 13 = 45m.

box: /bɑːks/ *n.* a rectangular shape in 2 dimensions, a cuboid shape in 3 dimentions.



kutu, dikdörtgensel şekil

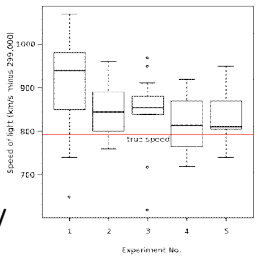
* Boxes are also known as cartons, cases and containers.

box brackets: /bɑːks-brækɪtz/ *n.* used to represent the numbers interval. *denoted by* "[ ]". ***same meaning*** *square brackets.*

köşeli parantez.

*We use square brackets for different situations. Such as matrix, interval and lcm.

box and whisker plot: /bɑːks-ænd-wɪskər-plɑːt/ *n.* is a



conveinent way of graphically depicting groups of numerical data through their quartiles.

kutu grafiği

* We use box and whisker plot to find the difference between upper and lower quartiles.

bottom: /bɑːtəm/ 1. *adj.* the lowest part of something. ***see also*** *top.*

alt

* A proper function has a top number less than its bottom number.

braces: /breɪsz/ *n.* used to delimit set, *denoted by* "{}".***same meaning*** *curly bracket.* ***see also*** *paranthesis.*

kaşlı ayraç, süslü parantez

*We use braces to show elements of sets.

brackets: /brækɪtz/ *n.* are symbol used in pairs to group things together. ***see also*** *round brackets, square brackets, curly brackets and bars.*

parantez (genel isim).

* Mathematics has few kind of brackets for different situations.

brainteaser: /breɪntiːzər/ *n.* a problem for which it is hard to find the answer, especially one which people enjoy trying to solve as a game.

zeka oyunu

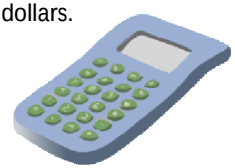
* Brainteasers are liven up the mathematical intelligence.

C

calculate: /kælkjʊleɪt/ *v.* to judge the number or amount of something by using the information that you already have, and adding, multiplying.

hesaplamak

* Calculate the cost of 15 apples when each apple costs 0.2 dollars.



calculator: /kælkjʊleɪtər/ *n.* an electronic device which is used for doing calculations. ***see also*** *abacus.*

hesap makinesi

* Scientific calculators are used to solve complex aducations and they can display graphs.

calculus: /kælkjʊləs/ *n.* an area of advanced mathematics in which continuously changing values are studied.

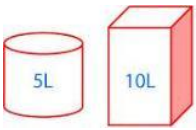
kalkülüs.

* Calculus is the combined mathematics of differential calculus and integral calculus.

cancellation: /kæn*t*səleıʃən/ *n.* a situation of eliminate terms from an expression.
sadeleştirme
* First, the numerator and denominator are written as a product of their factors. Then the common factors are cancelled.

cap: /kæp/ n. the operation "∩" in the sets. ***see also*** *intersection.*
kesişim
* Intersection's symbol looks like a cap. So we can say "cap".

capacity: /kəpæsəti/ *n.* volume which can be contained or received. ***see also*** *volume.*
kapasite, sığa (hacim)
* The capacity of the tub could be about 5 litres.

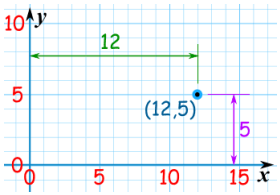


capital: /kæpıtəl/ n. a letter of the alphabet in the form and larger size.
büyük harf
* We use capital letters for show set's names.

cardinal number: /kɑ:dınəl-nʌmbər/ **1.** *n.* positive number which does not have a decimal or fraction. such as 1,2,3... ***see also*** ordinal number. **sayal (nicel) sayılar**
2. *n.* the total number of elements or items in a set.
eleman sayısı
* The cardinal number of the set A={2,,4,6,8,10} is 5.

Prime	Not prime
2, 3, 5, 7	1, 4, 6, 8, 9

carroll diagram: /kærəl-daıəgræm/ *n.* is a diagram used to sort objects and numbers, based on certain properties.
carroll diyagramı.
* Carroll diagram is named after famous author Lewis Carroll.



cartesian coordinates: /kɑ:tiziən-kəʊɔ:dınəıts/ *n.* a way to pinpoint where on a graph by how far up or down the point is. ***same meaning*** *rectangular coordinates*. ***see also*** *polar coordinates.*
kartezyen koordinat
* Cartesian is Rene Descartes's influence in mathematics.

cartesian product: /kɑːtiziən-prɒdʌkt/ *n.* is a operation which returns a set from multiple set. such as AxB, A and B are sets.
kartezyen çarpım.
* Cartesian product AxB is the set of all ordered pairs (a,b) where a∈A, b∈B.

celsius: /selsiəs/ adj, n a measurement of temperature on a standard in which 0° is the temperature at which water freezes, and 100° the temperature at which it boils . ***same meaning*** centigrate.
santigrat
* Are the temperatures given **in** Celsius or Fahrenheit?

ceiling: /siːlɪŋ/ adj. ceiling give you the nearest integer greater than our number. ***see also*** *floor.*
verilen sayıya en yakın büyük tamsayı
* For example our number is 2.47, so its ceiling is 3.

centesimal: /sentesəməl/ *adj.* hundredth or relating to hundredth parts.
yüzüncü, yüzde bir.
*Centimeter is centesimal of a meter.

census: /sentsəs/ *n.* collection of data from whole population.
nüfus sayımı
* According to the latest US Census. The total population of the US is about 288 millions.

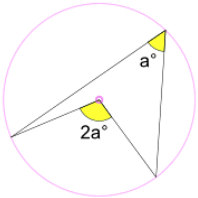
center: /sentər / *n.* the middle point or part ***same meaning*** centre.
merkez
* We usually use “O” letter for show circle’s center.

centi-: /senti-/ *pre.* 0.01 of the stated unit ***such as*** *centimetre, centilitre*.
santi-
*There are 100 centimeters in a meter.

centigrade: /sentɪgreɪd/ *adj, n.* a measurement of temperature on a standard in which 0° is the temperature at which water freezes, and 100° the temperature at which it boils . ***abbr*** *C.* ***same meaning*** celsius.
santigrat
*Th freezing point of water is 0° centigrate.

central angle: /sentrəl-æŋgəl/ *n.* is defined as the angle formed by two radius that meet at the center of the circle or polygon. ***see also*** *inscribed angle.*

merkez açı



* An inscribed angle a° is half of the central angle 2a°

centre: /sentər/ *see* ***center.***

centroid: /sentrɔɪd/ *n.* the center of mass. ***abbr*** *G*.

kütle merkezi.

* Find the coordinate of the centroid of ΔXYZ.

century: /sentʃəri/ *n.* a period of 100 years.

yüzyıl

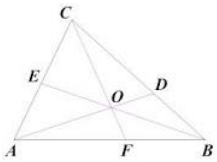
* How many centuries are there in a millenium?

certain event: /sɜːrtən-ɪvent/ *n.* an event that is certain, not probability.

kesin olay

* The "Pi" Day will be celebrated on the 14th of March this year. This is a certain event.

Ceva's theorem: /tʃeɪvaz θiːərəm/ given a triangle ABC and AD, BE, CF lines be drawn then using signed lengths of segments.



Seva teoremi

* The over triangle, Ceva's theorem is:

$$\frac{AF}{FB} X \frac{BD}{DC} X \frac{CE}{EA} = 1$$

change: /tʃeɪndʒ/ *v.* to become something different, to replace.

değiştirmek

* A change of variables is a standart technique used to reduce a difficult problem to a simpler one.

chart: /tʃɑːrt/ *n.* a drawing which shows information, often using lines and curves. ***see also*** *graph*

grafik, diyagram

* There is a chart on the classroom wall showing the relative heights of all the children.

check: /tʃek/ *v.* to examine something in order to make sure that it s correct or the way it should be. **kontrol etmek**

* Teachers can check for understanding in each class or after lesson.

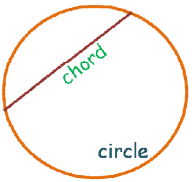
choose: /tʃuːz/ *v.* to decide which thing you want.

seçmek

*Choosing mathematical operations is an important part of the larger process

of translating English sentences into mathematical expressions.

chord: /kɔːrd/ a straight lineconnecting two points in a curve.



kiriş

* Find the lenght of the longest chord of the circle with radius 5 cm.

cipher: /saıfər/ *n.* the number of zero. ***same meaning*** *zero, null, cipher, nought*.

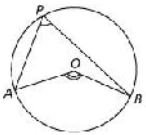
sıfır

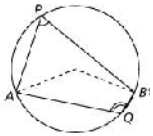
* Old Muslim mathematicians invented "cipher" term. It was one of the most important invention. Zero's Turkish translation is "sıfır" in Arabic "sİfr" also.

circle: /sɜːkl/ *n.* a continuous curved line, the points of which are always the same distance away from a fixed central point.

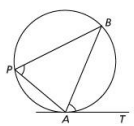
çember

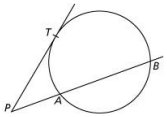
* If a circle has a radius of 6 cm, Its circumference is 37.7 cm.





circle theorems: /sɜːkl θiːərəm/ *n.* some of the theorems that are concerned with properties of a circle. The following pictures summerize this teorems.





çemberde merkez açı, çevre açı, teğet açı ve kiriş açı teoremleri.

* Circle theorems is the most important things in the angles of circle.

circumcenter: /sɜːkəm-sentər/ *n.* the center of a triangle's circum circle.

çevrel merkez

*The point where all the perpendicular bisectors intersect is called circumcenter.

circumcircle: /sɜːkəm-sɜːkl / *n.* the circle that passes through all vertices of a regular polygon. ***same meaning*** *circumscribed circle.*

çevrel çember

*Circumcenter of the triangle ABC passes through all its vertices A, B and C.

circumference: /səkʌm-pfərənts/ *n.* the distance around the edge of a circle.

çemberin çevresi

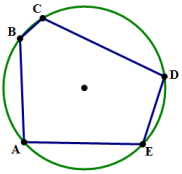
* The formula for the circumference of a circle , C=2 x π x r, r≈3.14.

circumscribe: /sɜ:kəmskraıb/ *v.* to draw a figure especially circle which surrounds it and touches each of its corners.

şekil (çember) içine almak

* Circle is circumscribed around a triangle.

circumscribed circle: /sɜ:kəmskraıbd-sɜ:kl/ *n.* the circle that passes through all vertices of a regular polygon. ***same meaning*** *circumcircle.*



çevrel çember

* Which of the following figure shows the circumscribed circle of the triangle.

cis: /sıs/ *n.* a complex notation that is abbreviation of cos + i.sin**θ**.

cis

* De Moivre's theorem is $(cis\theta)^n = cosn\theta + i.sinn\theta$.

classify: /klæsıfaı/ *v.* to arrenge in groups by some property.

sınıflandırmak

* The shapes are classified by the number of sides.

clock arithmetic: /klɑ:k ərıθmətık/ *see* ***modular arithmetic***

clockwise: /klɑ:kwaız/ *adj, adv.* moving in the direction of the hands on a clock. ***see also*** anti-clockwise, counterclockwise.

saat yönü

* The hands ina clock move from the top to th right, then down and then to the left, and back to the top. It's clockwise.

closed: /kloʊzd/ adj. not open.

kapalı.

* In a closed curve the starting point is always joined to the endpoint.

cluster: /klʌstər/ *n.* a group of similar things that are close together, sometimes surrounding something. ***same meaning*** *set.*

küme

* For the values 12, 19, 23, 24, 24, 25, 30, 35, 39, there is a cluster around 24.

coaxial: /kəʊæksiəl/ *adj.* sharing a common axis.

eşeksenli, ortak eksenli

* We generally use coaxial cables. In the center, It has a wire conductor. around this, circumferential conducter and dielectric. And lastly, protective pvc.

code: /kəʊd/ *n.* a system of numbers or words, letters or signs which is used to represent a message in secret form.

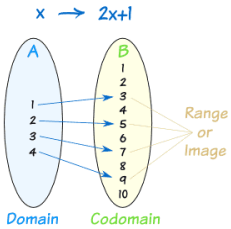
kod

*The source codes of this math programs are written.

codomain: /kəʊdəmeɪn/ *n.* target set of a function which is includes element of functions in the range. ***see also*** *domain, range.*

değer kümesi

* If the function is the square of natural numbers ℕ={1,2,3...}, then codomain is ℕ.



coefficient: /kəʊɪfɪʃənt/ *n.* number used to multiply a variable. ***see also*** *parameter.*

katsayı

*5x-3; Here 5 is the coefficient of the linear term 5x.

cofactor: /kɒʊfæktər/ *n.* the determinant obtainedby deleting the row and column of a given element of a matrix or determinant.

kofaktör, eşçarpan

* In matrix, we use minor and it gives us the cofactor.

coincident: /kəʊɪntsɪdent/ *adj.* two lines or shapes that lie exactly on top of each other.

çakışan

* These two lines are coincident, only you can't see them both, because they are on top of each other.

collect: /kəlekt/ *v.* to get things from different places and bring them together.

toplamak

* You can collect lots of data for your investigation.

collinear: /kəlɪniər/ *adj.* when three or more pointslie on a straight line.

aynı doğru üzerinde. doğrusal

*In the above diagram, the points M, S, T are collinear.

cologarithm: /kəlɒgərɪðəm/ *n.* equal to the negative of logarithm of the number itself. ***same meaning*** *antilogarithm.*

kologaritma, ters logaritma

* In chemistry a decimal cologarithm is indicated by the letter p. (pH)

column: /kɑ:ləm/ *n.* vertical bloks. an arrengment of figures, one above the other. ***see also*** row.
sütun
* You can addition by writting one number below the other and add one column at a time.

column graph: /kɑ:ləm-grɑ:f / *see* ***bar graph.***

column matrix: /kɑ:ləm-mætrıks/ *n.* a matrix with exactly one common.
sütun matris
* This matrix has three rows but only one column. So it's a column matrix.

$$A_j = \begin{bmatrix} A_{1j} \\ A_{2j} \\ \cdots \\ A_{n1,j} \end{bmatrix}$$

combination: /kɑ:mbıneıʃən/ *n.* a collection of things, in which the order does not matter. ***see also*** permutation.
kombinasyon, birleştirme
* The combination of picking 3 ball from the bag that has 10 balls: 10!/3!(10-3)!=120

combine: /kɑ:mbaın/ *v.* to mix or join thing together.
birleştirmek, bir araya getirmek

* A frequently-used procedure in algebra is the process of combining like terms.

comma: /kɑ:mə/ *n.* a typesetting symbol "," which has several distinct meaning in math. ***see also*** *point.*
virgül
* Comma can denote boundaries between elements in a list, as in {1, 2, ...}

commision: /kəmıʃən/ *n.* a fee paid for services, usually a percentage of the total cost.
komisyon
* If a salesperson receives a 10% commision on their sales and sells $1500 worth of merchandise, they would earn $150 in commision.

common: /kɑ:mən/ *adj.* belonging to more than one.
ortak
***** The common multiple of 2,3 and 4 are 12, 24, 36,...

common denominator: /kəmıʃən-dinɑ:məneıtər/ *n.* when two or more fractions have the same denominator.
ortak payda

* Identify the common denominator of two fractions ¼ and ½.

common difference: /kəmɪʃən-dɪfrənts/ *n.* the difference between each number in an arithmetic sequence.
ortak fark
***** The sequence {3, 5, 7, 9,...} is made by adding 2 each time, and so has a common difference of 2.

common factor: /kəmɪʃən-fæktər/ *n.* factors are the numbers you multiply together to get another number.
ortak çarpan
* Common factors of 16, 28 and 32 are 1, 2 and 4.

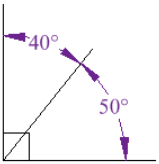
common fraction: /kəmɪʃən-frækʃən/ *see* ***simple fraction***

commutative law: /kəmju:tətɪv-lɑ:/ n. is the law that says you can swap numbers around and still get the same answer when you add or multiply. ***see also*** *associative law, distributive law.*
değişme özelliği
*Addition and multiplication are commutative over the set of real numbers. That means for any two real numbers x and y, x+y=y+x and x.y=y.x

compare: /kəmpeər/ *v.* to examine or look for the difference between two or more things.
karşılaştırmak
* We use "=, ≈, >, <, ≥, ≤" signs to compare numbers.

compass: /kʌmpəs/ *n.* an instrument with two arms, one sharp and one with a pencil that can be used to draw circles or arcs.
pergel.
* Use a compass to bisect all three angles in a triangle. Use the point of intersection.

complement: /kɑ:mplɪment/ *adj.* something added to complete. ***see also*** *supplement*.
tümleyen



* In dice, when the event is {5,6}, the complement is {1, 2, 3, 4}.

complementary angles: /kɑ:mplɪmentari æŋgəlz / *n.* two angles are complementary if they add up to 90 degrees. ***see also*** supplementary angles.
tümleyen açılar
* 34°, 56° and 38°, 62° are examples of complementary angles.

complete: /kəmpli:t/ **1.** *adj.* with all parts, whole.
tüm
2. *v.* to make whole or entire
tamamlamak
* I need three more answers to complete the math exam.

complex: /kɑ:mpleks/ *adj.* not simple or straighforward.
karmaşık
* complex analysis is one of the classical branches in mathematics with roots in the 19th century.

complex plane: /kɑ:mpleks pleın/ *n.* is a geometric representation of the complex numbers established by the real axis and the orthogonal imaginary axis.
karmaşık düzlem
* Complex plane can be thought of as a modified cartesian plane, real part represents x, imaginary part represents y-axis.

complex number: /kɑ:mpleks nʌmbər/ *n.* a combination of a real and imaginary number in the form a + bi.
karmaşık sayı
* Imaginary part of the given complex number 3i+10, is 3.

composite number: /kəmpɑ:zıt nʌmbər/ *n.* a whole number that can be divided by a number or numbers other than 1 or itself.
birleşik sayı (asal olmayan)
* 4,6,9,15 are some examples of composite numbers.

compound: /kəmpaʊnd/ adj. something consisting of two or more different parts.
bileşik
* x>5 and x<11 is a compound inequality which says that x takes values 5<x<11.

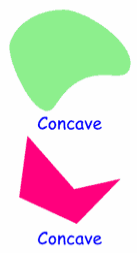
compound interest: /kəmpaʊnd ıntrəst/ *n.* where interest is calculated on both on the amount borrowed and any previous interest. ***see also*** simple interest
birleşik faiz.
* To calculate the compound interest for three years, make a spread sheet.

computation: /kɑ:mpjʊteıʃən/ *n.* is finding an answer by using mathematics or logic. ***see also*** calculation.
hesaplama.
* You can use a computer to do computations. But you can also do computations yourself when you add, subtract, multiply...

concave: /kɑːnkeɪv/ n. curved inwards. ***see also*** convex.

konkav, iç bükey

* Concave shapes has an internal angle is greater than 180°.



concentric: /kənsentrık/ *adj.* describes circles or something that have the same center.

eş merkezli

*Area of between two concentric circles is
called annulus.

conclusion: /kənkluːʒən/ *n.* the final part of something. ***see also*** *result.* **sonuç**

* Math is also a language or mode of communication. It is a way of expressing ideas clearly and rigorously from hypothesis to conclusion.

concrete: /kɑːŋkriːt/ *adj.* real and existing in a form that can be seen or felt. ***see also*** *abstract.*

somut

* Calculus is branch of the concrete mathematics.

conditional probability: /kəndıʃənəl -prɑːbəbılətі/ *n.* probability that an event will occur, when another event is known to occur or to have occured.

koşullu olasılık

* There are 6 red marble and 4 yellow marbles in a bag. Suppose Ed picks a red marble, again he wants to pick a red murble. The first marble selected is not repleced back, so the conditional probability P(pick a red)= 5/9

cone: /koʊn/ *n.* a solid object that has a circular base and one vertex.

koni

* When the vertex of a cone is not aligned directly above the center of its base, it is called on oblique cone.

confidence: /kɑːnfıdənts/ *n.* the quality of being certain of problem's data.

güvenirlik

* Confidence intervals have not been shown on any of the crude rate charts.

congruent: /kɑːŋgruənt/ *adj.* the same shape and size. ***see also*** *similar and equivalent.*

denk, benzer

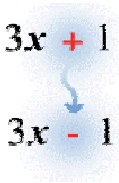
* If two things are congruent, they flip one over and move a little.

conic section: /koʊnık-sekʃən/ *n.* a section or slice through a cone.

koni kesiti

* By taking different slices through a conic section you can create a circle, an ellipse, a parabola or a hyperbola.

conjugate: /kɑːndʒʊgeɪt/ *adj.* in algebra the conjugate is where you change the sign in the middle of two terms.



eşlenik

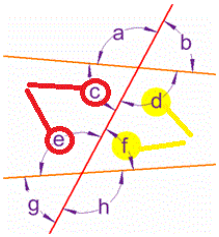
* Conjugate of the complex number 12-4i is 12+4i.

consecutive: /kənsekjʊtɪv/ *adj.* describes events, numbers, etc. that follow one after another without an interruption. ***same meaning*** *successive*.

ardışık

* The sum of least and greatest of 3 consecutive integers is 60. What are the values of the integers?

consecutive interior angles: /kənsekjʊtɪv-ɪntɪəriər-æŋglz/ *n.* when two lines are crossed, the pairs of angles on one side of the transversal but inside the two lines.



karşı durumlu açılar.

* Consecutive interior angles equal each other. It's U rule.

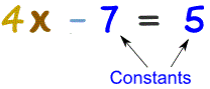
consecutive numbers: /kənsekjʊtɪv-nʌmbər/ numbers which follow each other in order without an interruption.

ardışık sayılar.

* consecutive odd numbers between 0 and 10 are 1, 3, 5, 7 and 9.

constant: /kɑːntstənt/ *adj.* a particular number or amount that never changes. fixed value. **sabit**

* For this example, 7 and 5 are constants.



constant function: /kɑːntstənt-fʌŋk/ *n.* is a linear function of the form y=b, b is constant.

sabit fonksiyon

* y=6 is a constant function. Its graph is a horizontal line.

construct: /kənstrʌkt/ *v.* to draw a shape, line or angle accurately using a compass ruler and pencil.

şekil çizmek

*Euclid solved problems graphically, by constructing instead of arithmetic.

construction: /kənstrʌkʃən/ *n.* the process of drawing of geometric items. **çizim**

*In pure geometric construction, we usually use compass, ruler and pencil.

contain: /kənteın/ v. to include as a part.
içermek, kapsamak
*A cake contains lots of ingredients such as butter, sugar, flour, eggs... etc.

contradiction: /kɑːntrəˈdıkʃən/ *n.* is a logical incompatibility between two or more propositions.
çelişki
*A contradiction is a statement that goes against an assumption.

contrapositive: /kɑːntrə - pɑːzətıv/ *n*. negating the both statement.
karşıt ters, devrik
*the contrapositive of "if it is raining then the grass is wet" is "if the grass is not wet then it is not raining."

contingent: /kəntındʒənt/ *n.* depending on something else in the future in order to happen.
muhtemel, olasılıklı
*Contingency table displays sample values in relation to two different variables thet may be dependent or contingent on one another.

continuous data: /kəntınjuəs-deıtə/ *n.* data that can take any value. ***see also*** *discrete data*.
sürekli veri
* The height of a boy over time is an exaple of continuous data.

control group: /kəntrəʊl-gruːp/ *n.* in experimental design, the control group provides a baseline assessment of any change.
kontrol grubu
* In a clinical trial, control groups try a brand's new drugs.

converge: /kənvɜːdʒ/ *v.* approach toward a definite value or point.
yakınsamak
* A sequence of numbers or function can also converge to a spesific value.

convergent: /kənvɜrdʒənt/ adj. a series is said to be convergent if it approaches some limit. ***see also*** *divergent.*
yakınsak
*If a series converges, the individual terms of series must approach zero.

converging sequence: /kənvɜːdʒıŋ-siːkwənts/ *n.* a sequence converges when it keeps getting clser to a certain value.
yakınsak dizi

* the term of 1/n are: 1, 1/2, 1/3, 1/4, 1/5. That sequence converges to "0".Because terms get closer and closer to "0".

converse: /kɑːnvɜːrs/ *adj*. the opposite.
zıt
* Converse of "If it is raining then the grass is wet." is "If the grass is wet then it is raining."

conversion: /kənˈvɜːrʃən/ *n.* when someone or something is converted from one thing to another.
dönüştürme
* We know the following conversions: 1 min. = 60 sec. and 60 min. = 1 hour.

convex: /kɑːnveks/ *adj.* curved outwards. ***see also*** *concav*.
konveks, dış bükey
* Measure of internal angles of a convex polygon is always less than 180°.

coordinate: /koʊɔːdıneıt/ *n.* coordinate is a set of values that show an exact position**.** ***see also*** *polar coordinates and cartesian coordinates.*
koordinat.

* Coordinates are represented by putting the ordered pairs in paranthesis. For example (x,y).

coordinate plane: /koʊɔːdıneıt pleın/ the plane containing the x axis and y axis. see axis.
koordinat düzlemi
* In a coordinate plane, number lines intersect at origin, zero point.

coplanar: /kəpleınər/ *adj.* lying on a common plane.
eş düzlemli, ortak düzlemli
* Parallel lines in three dimensional space are coplanar, but skew lines are not.

coprime: /kəpraım/ adj. two or more positive integers having no positive integer factors in common, aside from 1.
aralarında asal
* 3 and 5, 5 and 7, 11 and 13 are co-prime numbers.

corner: /kɔːrnər/ *n.* the point, area or line which is formed by the meeting of two lines. ***see also*** *vertex.* **köşe**
* A square has 4 corners and rectangle has also 4.

corollary: /kɔːrəleri/ *n.* a natural result that follows from a theorem.
doğal sonuç

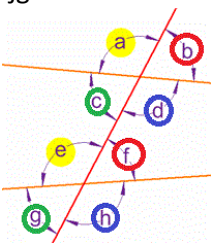
* A theorem is a major result, corollary is a theorem that follows on from another theorem. And Lemma is a small result.

correct: /kərekt/ *adj.* accurate or having no mistake.
doğru
* Was that the correct answer?

correction: /kərekʃən/ a change made to something in order to correct or improve it.
düzeltme
*In mathematics, we use different types of corrections.

correlation: /kɔːrəleıʃən/ *n* . a connection between two or more things.
korelsyon, karşılıklı ilişki
*Most measures of correlation take on values frpm -1 to 1, or from 0 to 1.

corresponding angles: /kɔːrıspɑːndıŋ-æŋgl/ *n.* when two lines are crossed by another line (***see also*** *transversal*), the angles in matching corners are called corresponding angles.



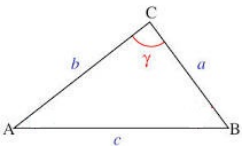
yöndeş açılar

* I and m are parellel lines, what are the measures of α, β and their corresponding angles?

cosecant: /kəʊsiːkənt/ *n.* in a right triangle, this is the lenght of hypotenuse divided by the lenght of opposite side. ***abbr*** *csc.*
kosekant
* Which grph represents the function cosecant?

cosine: /kəʊsaın/ *n.* in a right triangle, this is the lenght of adjacent divided by the lenght of hypotenuse. ***abbr*** *cos.*
kosinüs, cosinus
* In the triangle of "22.5°, 67.5° and 90°", cos 22.5° = 4/5

cosine rule: /kəʊsaın-ruːl/ *n.* is relates the lenghts of the sides of triangle to the cosine of one of its angles. $c^2=a^2+b^2-2abcos\gamma$. ***same meaning*** *law of cosine.*



kosinüs teoremi
* Cosine rule like the Pyhthagoras Theorem with something extra.

cost: /kɔːst/ **1.** *v.* to incur a charge, a price.
mâl olmak

2. *n.* amount of money.
ücret, maliyet
*It will cost you a lot of money to take a trip around the world.

cotangent: /kəʊtændʒənt/ *n.* in a right triangle, this is the lenght of adjacent divided by the lenght of opposite side. ***abbr*** *cot, ctg.*
kotanjant, cotanjant
* What is the secant, cosecant and cotangent of the angle x in figure 8.2?

count: /kaʊnt/ *v.* to say the names of numbers one after the other in order.
saymak
* Count is a total number of 12 eggs.

counting numbers: /kaʊntɪŋ-nʌmbər/ *n.* positive integers, zero is sometimes included.
same meaning *natural numbers.*
doğal sayılar
* "0" is not a counting number.

counter: /kaʊntər/ *n.* a small manipulative object such as a coin, marble, a stone, a card, a toy...
sayma aracı
*Cildren simply link the monkey counters' hands together to practice counting, number recognition and sequencing.

counterexample: /kaʊntərɪgzɑːmpəl/ *n.* is an example that is used to disprove a statement.
karşı örnek
* "The opposite of a number is always positive." counterexample for the above statement: "The opposite of 2 is -2, a negative number".

counterclockwise: /kaʊntər-klɑːkwaɪz/ *adj. adv.* moving in the opposite direction to hands on a clock. ***same meaning*** anti-clockwise.
saat yönü tersi
* Angles from line are usually measured counterclockwise.

cross: /krɑːs/ *n.* the opposite.
çapraz
* The figure obtained in the cross-section depends on the orientation of the plane cutting it.

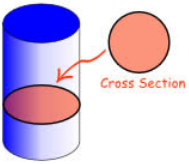
$$\frac{a}{b} = \frac{c}{d} \rightarrow ad = bc$$

cross multiply: /krɑːs-mʌltɪplaɪ/ *n.* a method that we multiply the numerator of each side by the denominator of the other side. crossing the terms over.

çapraz çarpım

* Cross multiply can help speed up a solution.

cross section: /krɑːs sekʃən/ *n.* is a shape you get when cutting straight across an object.



ara kesit

* The cross section of a circular cylinder is a circle.

cryptography: /krɪpˈtɑːgrəfi/ *n.* the area of mathematics concerning the secure coding of information.

kriptografi, şifreleme

* Fundamental mathematical tools for cryptography, including primality testing, factorization algorithms, probability and information theory.

cube: /kjuːb/ n. a solid object with six square sides of equal size.

küp

* Total surface area of cube, If one side is 2 cm, It is 6x2x2= 24 cm.

cube number: /kjuːb-nʌmbər/ *n.* the result of using a whole number in a multiplication three times. ***see also*** *square number*.

küpsel sayı

* 3x3x3 = 27, 27 is a cube number.

cube root: /kjuːb ruːt/ *n.* is a number, it means raised to the 1/3. denoted by $\sqrt[3]{\ }$. ***see also*** *square root.*

küp kök

* The cube root of 27 is 3.

cubed: /kjuːbd/ n. short for "to the third power". ***see also*** *squared.*

küpü (bir sayının)

* 2 cubed is 8, as you see $2^3=2x2x2=8$.

cubic (measure): /kjuːbɪk/ n. a unit used to measure volume or capacity. ***see also*** *square*

küp (m^3, cm^3)

* A cubic meter of pure water has a mass of 1000kg.

cubic equation: /kjuːbɪk ikweɪʒən/ *n.* an equation where the highest exponent of the variable is a cube. ***see also*** *quadratic equation*.

üçüncü dereceden denklem

*$ax^3+bx^2+cx+d=0$ is a basic form of cubic equations.

cuboid: /kju:b ɔɪd/ *n.* a solid object with six rectangular sides, like a cube.

küboid

* There are 12 edges and 8 vertices in a cuboid.

cumulative frequency: /kju:mjʊlətɪv-fri:kwəntsi/ *n.* The sum of the frequencies of all the values up to a given value.

birikimli frekans, yığılmalı frekans

* The following graph is example of cumulative frequency.

cup: /kʌp/ n. the operation ∪. ***see also*** *union.*

birleşim

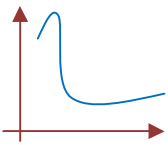
* The uniun number like a cup so we use this word.

curly brackets: /kɜ:rli-brækɪtz/ *n.* used to delimit set, denoted by "{}". ***same meaning*** *braces.*

kaşlı ayraç, süslü parantez

* The curly brackets mean "set", like a set of solutions.

curve: /kɜ:rv/ *n.* a line which bends continuously and has no straight parts.



eğri

* Circle and ellipse are closed curve, parabola is open curve.

curvature: /kɜ:vətʃ ər/ *n.* the state of being curved or bent.

eğrilik

* A straight line can be throught of as an arc of a circle of infiite radius. Its curveture is zero.

customary system: /kʌstəməri-sıstım/ *see* ***US customary system***

cycle: /saıkl/ *n.* a group of events which happen in a particular order, one following the other, and which are often repeated.

döngü, devir

* If a quadrilateral has all of vertices lying on a circle, then its known as a cyclic quadrilateral.

cylinder: /sılındər/ *n.* a solid tube with long straight sides and two circular

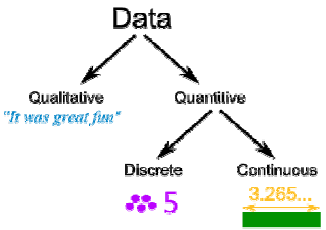
ends the same size.
silindir
* Which of the following conicides with the axis of rotation of a right cylinder?

cypher: /saıfər/ ***see*** *cipher*

D

data: /deıtə/ *n. unc.* data can be defined as a collection of facts or information. **veri**
* Collection of data is an important thing in statistical analysis.

date: /deıt/ *n.* the reference of a particular day in a calender system



is called date.
tarih
* The date of our math exam is March the 25th.

day: /deı/ *n.* the 24 hour period from midnight to the next midnight.
gün
* The Earth takes 365 days to complete one revolution.

deca-: /dekə-/ *pref.* is equivalent to 10. ***see also*** *hect-.*
deka-
* How many centimeters equal 1 decameter?

decade: /dekeıd/ *n.* a period of 10 years.
onyıl
* The years from 2000 to 2009 forms a decade.

decagon: /dekəgɑ:n/ n. a 10-sided polygon, a flat shape with straight sides.
ongen
* Each angle in a regular decagon is equal to 144°.

decahedron: /dekəhi:drən/ *n.* a solid shape with ten flat faces. ***see also*** *polyhedron.*

dekahedron
* decahedron is a type of polyhedron.

decimal: /desəməl/ *n*. based on 10.
on tabanında
* 327's decimal number digits are 7 units, 2 tens and 3 hundrets.

decimal number: /desəməl-nʌmbər/ n. is a number that uses a decimalpoint followed by digits that show a value smaller than one.

ondalık sayı

* He converted the decimal number 153.31 to decimal fraction.

decimal fraction: /desəməl-frækʃən/ *n.* is a fraction in which the denominator is a power of ten.

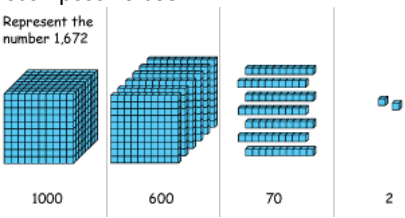
ondalık kesir

* 153.31 equal to $\frac{15331}{100}$. second one is a decimal fraction.

decompose: /di:kəmpəʊz/ *v.* separating numbers into their components, to divide a number into smaller part.

basamaklarına ayırmak

* What will we get when we decompose 25.653?



decrease: /di:kri:s/ *v.* is the process of reducing something gradually. ***see also*** *increase.*

azalma, azaltmak

* Andrew's weight decreased from 73.2 kilograms to 70.8.

deduct: /didʌkt/ *v.* to take away from, to subtract.

çıkarmak

* They have deducted $2 from the price

deduction: /didʌkʃən/ *n.* method of logical reasoning in which one uses a general rule to determine individual elements. ***see also*** *induction*

tümden gelim

* The only skill involved in sudoku is logical deduction.

defective number: /difektɪv-nʌmbər/ ***see*** *deficient number*.

deficient number: /difɪʃənt-nʌmbər/ *n.* is a number which its sum of all proper divisors is less than the number. ***same meaning*** *defective number*

arızalı sayı

* The proper divisors of 14 are 1,2 and 7. 1+2+7=10 so 14 is a deficient number.

definite: /defənət/ *adj.* certain or fixed. ***see also*** *indefinite.*

belirli

*A definite integral is an integral with upper and lower limits.

definition: /defənɪʃən/ *n.* the formal statement of the meaning or significance of a word.

tanım

*Different scholars have different definitions of mathematics.

degree: /diˈgri:/ **1.** *n.* for a polynomial with one variable, the degree is the largest exponent of that variable.

derece (cebir)

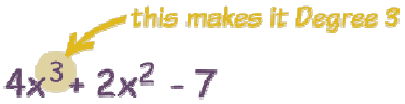
2. *n*. a measure for angles.

derece (geometri)

3. *n*. a measure of temperature.

derece (sıcaklık)

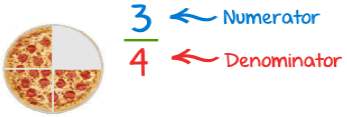
* This thermometer shows 28 degrees celcius.



deltoid: /deltɔɪd/ *n*. a 4-sided flat shape with two distinct pairs of adjacent sides that are congruent. ***same meaning*** *kite.*

deltoid

* A deltoid has one line of symmetry.



denominator: /dinɑ:məneɪtər/ *n*. the number below the bar in a fraction is called the denominator. ***see also*** *numerator and vinculum.*

payda

* A fraction with zero (0) in the denominator is undefined.

denote: /dinoʊt/ *v.* to signify by a visible sign.

simgelemek

* In the history of mathematics, some symbols have denoted numbers, shapes or patterns.

density: /dentsəti/ *n.* a measure of how much matter is in a certain volume. ***abbr*** *d*.

yoğunluk

* Density of water is 1 g/ml.

dependent event: /dipendənt-ɪvent/ *n.* if the outcome of one event affects the outcome of another, then the events are said to be dependent events. ***see also*** *independent event.*

bağımlı olay

* Taking out a marble from a bag containing some marbles and not replacing it, and then taking out a second marble are dependent events.

dependent variable: /dipendənt -veəriəbl/*n.* the output value of a function. ***see also*** *independent variable.*

bağımlı değişken

* y=7x+5, the independent variable is y.

depth: /depθ/ *n.* the distance from the top of something to the bottom.
derinlik
* The lake reaches a maximum depth of 262 metres.

descending order: /disendıŋ-ɔ:rdər/ *n.* when a group of numbers is arrenged in order from the greatest to the least, the numbers are said to be in descending order.
azalan sıralama
* Arrange the numbers 44, 200, 250 and 132, in descending order.

describe: /diskraıb/ *v.* to say what something is like.
tasvir etmek, betimlemek
*Can you describe a dodecahedron?

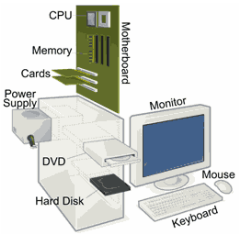
determinant: /ditɜ:rmınənt/ *n.* is a value that can be calculated from a square matrix.
determinant

$$\begin{bmatrix} 3 & 8 \\ 4 & 6 \end{bmatrix}$$

* The determinant of that matrix is 3x6-8x4=-14.

diagonal: /daıgənəl/ *n.* is a line segment connecting two non-adjacent vertices of a polygon.
köşegen
* To find the total number of diagonals in a polygon, multiply the number of diagonals per vertex (n-3) by the number of vercites, n, and divide by 2.

diagram: /daıgræm/ *n.* a drawing used to descibe something.
diyagram, grafik resim
* This is a diagram showing the main parts of a personal computer.



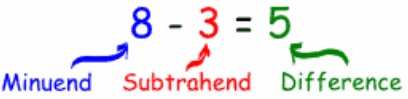
diameter: /daımıtər/ *n.* is a line segment that passes through the center of a circle with both its endpoints on the circle.
çap
* a diameter is the longest chord of a circle.

diamond: /daımənd/ *n.* is a parallelogram with four equal sides. ***same meaning*** *rhombus.* ***see also*** *parallelogram.*
eşkenar dörtgen
* Find the area of a diamond with diagonals 14 cm and 12 cm.

dice: /daıs/ *plural form of* ***die.***

die: /daı/ *n.* is in the form of cube marked with dots or numbers.
zar

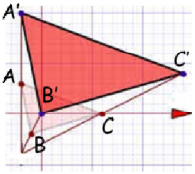
* Sum of the dots or numbers of two opposite faces in a die is always 7.



difference: /dıfrənts/ *n.* is the result that you get when you subtract one number from another.
fark
* William bought a shirt for $38.23 and a trouser for $55.52. Difference between their costs is $17.29

digit: /dıdʒıt/ *n.* a digit is symbol used to write numbers.
basamak, rakam hanesi
* The largest 4-digit numbers is 9999.

dilation: /daıleıʃən/ *v.* is similarity transformation in which a figure is enlarged or reduced using a scale factor.
şekli büyütmek

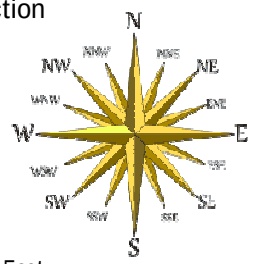


* A'B'C' is dilation of ABC.

dimension: /daımentʃən/ *n.* dimensions are used to describe the size and shape of an object.
boyut.
* Length and width are the dimensions of a 2-dimensional figure.

direct proportion (variation): /daırekt-prəpɔ:rʃən/ *n.* two quantities, i.e. y is said to be directly proportional x, if y = k.x where k is a constant.
doğru orantı
* A biscuit manufacturing company packs 26 packets per carton. Find the number of packets in 5 cartons. This example solved on direct proportion.

direction: /daırekʃən or dırekʃən/ n. direction gives the information about th way towards which an object moves.
yön



*There are four principal directions, East, South, West and North.

directrix: /daırek trıks/ *n.* directrix of a conic section is a line such that ratio of the distance of the points on conic section from focus to its distance.
doğrultman (hiperbol, elips, parabol)
* Find the equation of directrix of the parabola$y^2=12x$.

discount: /dıskaʊnt/ *n.* a reduction an price.

indirim

* The regular price of a jacket was $50. A discount of 10% was marked on it. So price of the jacket after discount is $45.

discrete data: /dıskri:t-deıtə/ *n.* a set of data having finite number of values or data points. ***see also*** *caontinuous data*.

kesikli veri

* John spent 5 days in swimming pool in a week. This is an example of discrete data as swimming period.

discriminant: /dıskrımınənt/ *n.* discriminant of an equation gives an idea of the number of roots and the nature of roots of the equation. ***abbr*** D.

diskriminant

* If $ax^2+bx+c=0$ is a quadratic equation, the discriminant of the equation $D=b^2-4ac$.

disjoint: /dısdʒɔınt/ *adj.* two or more sets which have no members in common.

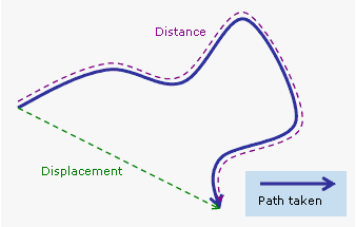
ayrık

* A={a, b, c} and B={d, e, f} are disjoint.

displacement: /dıspleısmənt/ *n.* is defined as the vector distance from the inital point to final point. ***see also*** *distance*.

yer değiştirme.

* Ben traveled from A to B, 29 km. Again he started to travel back from B to A and reached the position C. |CB|=7 km. So the displacement is 22 km.



distance: /dıstənts/ *n.* a length, a measurement of how far through space. ***see also*** *displacement.*

alınan yol

* Ben traveled from A to B, 29 km. Again he started to travel back from B to A and reached the position C. |CB|=7 km. So the distance is 36 km.

distinct: /dıstıŋkt/ *adj.* different from one another.

farklı

*A set is a collection of well defined and distinct objects.

distributive law (property): /dıstrıbjʊtıv -lɔ:/ *n.* the product of number and sum is equal to the sum of the individual products of addends and the number. ***see also*** *commutative and assosiative laws.*

dağılma özelliği

* 3x(2+4) = 3x2 + 3x4 so the "3" can be distribudet across the "2+4" into 3 times 2 and 3 times 4.

divergent: /daɪvɜrdʒənt/ adj. divergent series is an infinite series that is not convergent. ***see also*** *convergent.*

ıraksak

*If a series converges, the individual terms of series must approach zero but harmonic series approach zero and it is an example of divergent series.

divide: /dıvaıd/ *v.* is to split into equal parts or groups.

bölmek

* There are 12 chocolates, and 3 friands want to share them, how do they divide the chocolates?

dividend: /dıvıdend/ *n.* the number that is divided by another number in a division operation is called a dividend. ***see also*** *divisor, quotient and remainder.*

bölünen

* In this equation, 728 ÷ 7 = 104, the dividend is 728.

divisibility: /dıvızəbıləti/ *n.* a number is divisible, if the given divisor divides the number with no remainder.

bölünebilme

* 15 is divisible by 3, because 15÷3 = 5 exactly.

divisible: /dıvızəbəl/ *adj.* when one integer divided by another integer and the result is an exact whole number.

bölünebilir

*15 is divisible by 3, because 15÷3=5 exactly.

division: /dıvıʒn/ *n.* is one of the basic math operations. It divide to numbers. ***see also*** *addition, subtraction and multiplication.*

bölme işlemi

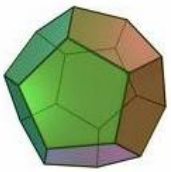
* The division number sentence 8÷4 = 2 says that there are four groups of 2's in 8.

divisor: /dıvaızər/ *n.* the quantity, the dividend is to be divided is called the divisor.

bölen

* In this expression 14/2 = 7, 2 is the divisor.

dodecahedron: /dəʊdekəhi:drən/ *n.* is a polyhedron with 12 faces. it is a special shape in mathematics.



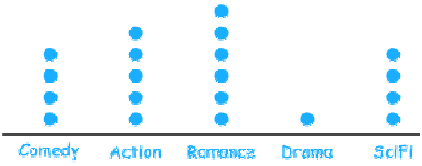
dodekahedron, düzgün on iki yüzlü

* Many of mathematicians believe that dodecahedron is the universe's shape and the shape include the golden ratio.

domain: /dəʊmeɪn/ *n.* all the values that go into the function. ***see also*** *range.*

tanım kümesi

* If the function f(x) = x² is given the values x={1,2,3,...}, domain.



dot plot: /dɑːt-plɑːt/ *n.* a graphical display of data using dots.

nokta grafiği

* In dot plot, the number of dots over the number line tells the value of data points.

double: /dʌbəl/ *adj.* when a number is multiplied by 2, we say that it is doubled. ***see also*** *triple.*

iki kat, çiftleme

* John has 4 candies. Hasan has double the candies as many as John has. Hasan has 8 candies.

dozen: /dʌzən/n. a group of 12 items.

düzine

* Lara bought 1 dozen of rose.

E

e: / iː/ *n.* is the base of the natural logarithm. It is equivalent to 2.71...

e sayısı.

* It is often called Euler's number after Leonhard Euler.

eccentricity: /eksentrɪsəti/ n. how much a conic section (ellipse, parabola, hyperbola) varies from being circular. ***abbr*** *e.*

dış merkezlilik, eksantriklik

* At e=0, we get a circle, for 0<e<1 we get an ellipse. If e=1 we get a parabola, e>1 we get a hyperbola and for the infinite eccentricity we get a line.

edge: /edʒ/ *n.* the line where two surfaces meet.

kenar

* Tetrahedron has 6 edges.

element: /elɪmənt/ *n.* a member of set or matrix. ***same meaning*** *member.* ***abbr*** *∈.*

eleman

* The elements of the set {2, 7, 3} are 2, 3 and 7.

elementary event: /elımentəri-ıvent/ *n.* is any single outcome or element of a sample space. ***same meaning*** *atomic event and simple event.*

örnek olay

* When two coins are tossed simultaneously, the possible outcomes are HH, HT, TH and TT. Any outcome like {HH} is called an elementary event.

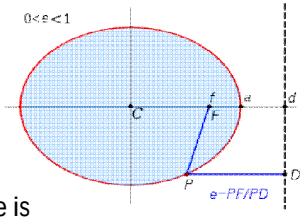
elimination method: /ilımıneıʃən-meθəd/ *n.* is the process of eleminating one of the variables in a system of equations using basic operations.

yok etme yöntemi

* 2x + y + 3 = 2
  4x + y =2

Multiply the first equation with -1 and add, eliminate y.

ellipse: /ilıps/ *n.* is a type of conic section that formed when a cone is cut by a plane.



elips

* All the planets move around the sun in elliptical orbits.

empty set: /empti-set/ *n.* is a set with no elements. it can be symbolized by {} or ∅. same meaning null set.

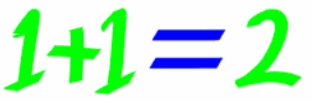
boş küme

* A={2,6,8} and B={3,5,7}, C represent the intersection of A and B. so C is an empty set because there is no element common between the two sets.

enlarge: /ınkspænd/ *v.* to become bigger ***see also*** *cancel, simplify and expand.*

genişletmek

*To enlarge a fraction means multiply



the top and bottom by a same number.

equal: /i:kwəl/ *adj.* exactly the same amount or value.

eşit

* 100 cents is equal to 1 dollar.

equalise: /i:kwəlaız/ *see* ***equalize***

equalize: /i:kwəlaız/ *v.* to make things equal.

eşitlemek

*Let's equalize these denominators.

equally likely: /i:kwəli-laıkli/ *adj.* the outcomes of an experiment are equally likely to occur when the probability of each outcome is equal. ***see also*** *likely and unlikely.*

same meaning *even chance and as likely as not*.

eşit olasılıklı

* When you toss a coin, you are equally likely to get a head or a tail.

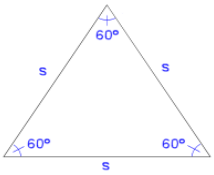
equation: /ikweɪʒən/ *n.* is a mathematical sentence that uses the equal sign (=) to show that two expression are equal.

denklem, eşitlik

* Solve the equation for x; 7x+8=1.

equiangular: /iːkwiæŋgjʊlər/ ***see*** *equilateral.*

equilateral: /iːkwilætərəl/ *adj.* a polygon with all its sides equal is called an equilateral. ***see also*** *isosceles.*



eşkenar

* An equilateral triangle's all angles are 60°.

equivalent: /ɪkwɪvələnt/ *adj.* equivalent things are not same but have the same solutions or value . ***see also*** *congruent and similar.*

denk

* 6/10 and 9/15 are equivalent fractions.

estimate: /estɪmeɪt/ *v.* a close guess of the actual value. ***same meaning*** *guess.*

tahmin etmek.

* Alex estimated there were 10,000 sunflowers in the field.

evaluate: /ivæljueɪt/ *v.* to calculate the value. ***same meaning*** *calculate.*

hesaplamak

* Evaluate the cost of each pie if 3 pies cost $21.

even chance: /iːvən-tʃɑːns/ ***see*** *equally likely*

even number: /iːvən-nʌmbər/ *adj.* any integer that can be divided exactly by 2. ***see also*** *odd number*.

çift sayı

*Even number's last digits be 0, 2, 4, 6 or 8.

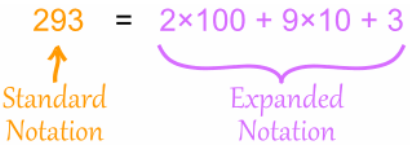
event: /ɪvent/ *n.* is one or more outcome of an experiment. ***see also*** *elementary, dependent, independent and certain events.* **olay**

* Which of the following is not a possible event when number cube is rolled?

example: /ɪgzɑːmpəl/ *n.* something that is typical group of things that you are talking about.
örnek
*These are good examples to understand exponents.

expand: /ɪkspænd/ *v.* removing, open the brackets. ***see also*** *factoring.*
paratez dışına genisletmek
* Expand 3x(5+2), 3x(5+2)= 3x5 + 3x2 it is now expanded.

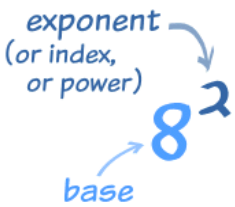
expanded notation (form): /ɪkspændɪd-nəʊteɪʃən/ *n.* writing a number to show the value of each digit. ***see also*** *standart form, short word form and scientific notation.*
genişletilmiş gösterim
* Expended notation of number is shown as a sum of each digit multiplied by its matching place value. (units, tents,...)



expense: /ɪkspents/ *n.* the amount of money, spent on something. ***see also*** *income.*
gider, masraf
*Buying the car was a big expense, but will be worth it in the long run.

experimental probability: /ɪksperɪmentəl-prɑːbəˈbɪləti/ *n.* is the ratio of the number of times the event occurs to the total number of trials.
deneysel olasılık
* A coin is tossed 60 times. 27 times head appeared. So experimental probability of getting a head is 27/60.

exponent: /ɪkspəʊnənt/ *n.* the exponent of a number says how many times to use that number in a multiplication.



same meaning *power, index.*
üs
*For 8^2, "2" says to use the 8 two times in a multiplication. So 8x8=64.

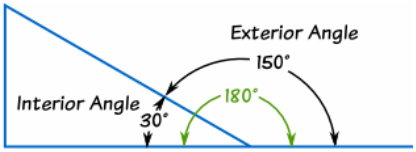
express: /ɪkspres/ *v.* to show what you think or how you feel using words or actions.
ifade etmek
* Mathematical symbols found within all branches of mathematics to express a formula or operations or to represent a constant.

expression: /ɪkspreʃən/ *n.* is a mathematical phrase that combines numbers and/or variables using mathematical operations.

ifade

* The following are a few mathematical expressions.
5+6-(3+2)/18
1+b-a
log_3^{x+1}+ 3²

exterior angle: /ɪkstɪəriər æŋgl/



n. the angle between any side of a shape, and a line extended from the next side. ***see also*** *interior angle.*

dış açı

* The number of exterior angles in a polygon = the number of sides of the polygon.

F

face: /feɪs/ *n.* is a flat surface of a three dimensional figure.

yüzey

* A triangular pyramid has four triangular faces.

factor: /fæktər/ *n.* an integer or expression that divides into another integer or expression exactly. ***see also*** *multiplier, multiplicand and product.*

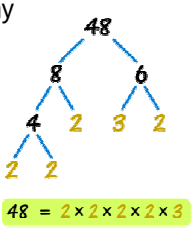
çarpan

* By multiplying (x+2) and (x+3), we get x²+5x+6. So (x+2) and (x+3) are the fractions of x²+5x+6.

factor tree: /fæktər-tri:/ *n.* a special diagram where you find the factors of a number, then the factors of those numbers etc, until you can't factor any more.

çarpan ağacı

* Here we see the factor tree of 48 which reveals that 48=2x2x2x2x3.



factorial: /fæktɔ:riəl/ *n.* the result of multiplying a sequence of descending natural numbers. It is denoted as n!.

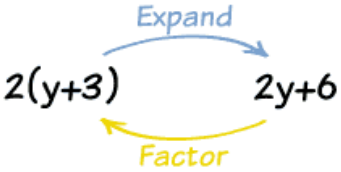
faktöriyel

* For example, factorial of four; 4!=4x3x2x1=24.

factoring: /fæktɔ:rɪɪŋ/ v. finding what to multiply to get an expression. ***same meaning*** *factorizing.* ***see also*** *expanding.*

çarpanlara ayırmak (parantezlemek)

* The factors of 2y+6, 2(y+3) so 2 and (y+3).



factorizing: /fæktəraızıŋ/ ***see*** *factoring.*

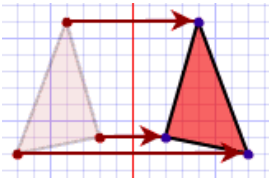
fahrenheit: /færənhaıt/ *n.* is a temparature scale, where the freezing point of water is marked at 32°F and the boiling point is marked at 212°F. ***abbr*** *F.*
fahrenayt
* In figure, the temperature is marked till 46°F.

feet: /fi:t/ *plural from of* ***foot.***

finite: /faınaıt/ *n.* has an end, not infinite. ***see also*** *infinite*.
sonlu
* The set A={1,2,3,4,5} has 5 elements and so it is a finite set.

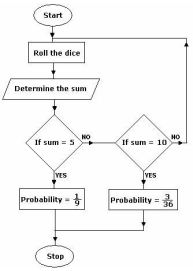
first: /fɜ:st/ *n.* an ordinary number that shows the beginning number of a set .
birinci
* Consider the set of vowels, V={a,e,i,o,u}. This set starts with the letter 'a' is the first element of set V.

flat: /flæt/ *n.* not curved or bumpy. **düz**
* A cube has six flat sides.



flip: /flıp/ *v.* turn something across a line, creating a mirror image of the original figure. ***see also*** *reflection.*
çevirmek (yansıma oluşturmak)
* Which of these shows a slip?

flow chart: /fləʊ tʃɑ:t/ *n.* represents a sequence of operations or algorithms by using diagram.
akış çizelgesi



* The flow chart shows the flow of data.

foci: /fəʊsaı/ *plural form of* ***focus.***

focus: /fəʊkəs/ *n.* is a special points with reference to which any variety of curves is constructed.
odak
* A parabola has a focus and a directix.

follow: /fɑ:loʊ/ **1.** *v.* to happen or come after something.
takip etmek (bir sırayı)

2. "the following" *adj.* what comes next, often used to introduce a list, report or question.

aşağıdaki

***** $x_n=n^3$, an example of this type of number sequence could be the following:
1, 8, 27, 64, 125, ...

foot: / fʊt/ *n.* is the customary unit of length.

foot

* 1 foot equal to 12 inches.

formula: /fɔ:mjʊlə/ *n.* numbers and symbols that show how to work something out.

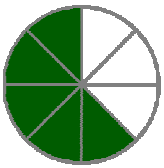
formül

* The formula of the volume of a box is "V=h x w x l"

formulae: /fɔ:mjʊli/ (or **formulas**) *plural form of* ***formula***.

fraction: /frækʃən/ *n.* is a number that represents part of whole.

kesir



* In the figure shown 5 out of 8 slices are shaded. The fraction 5/8 names the shaded part.

fraction bar: /frækʃən-bɑ:r/ *n.* the line that separates the numerator and denominator. ***same meaning*** *vinculum.*

kesir çizgisi

* We show fractions with use fraction bar.

frequency: /fri:kwəntsi/ *n.* the number of occurrences of a particular item in a set of data.

frekans

* The next table shows us to our garden's flowers.

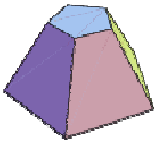
Color	Number
Yellow	5
Lavender	3
Red	4

frequency distribution: /fri:kwəntsi-dıstrıbju:ʃən/ *n.* a table that lists a set of their frequency.

frekans dağılımı

* This table shows that "How many times each one occurs?"

frustum: /frʌstəm/ *n.*is created by slicing the top of a cone or a pyramid.



same meaning *truncated.*

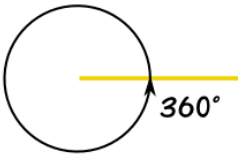
kesik

* This shape is an example of frustum of a pyramid.

full angle: /fʊl-æŋgəl/ *n*. it is exactly 360°. ***same meaning*** *perigon and round angle.*

tam açı

* Four right angles equal a full angle.



function: /fʌŋkʃən/ *n.* is a relation in which each element of the domain is paired with exactly one element of the range. ***abbr*** *f.*

fonksiyon

* A function is a relationship between two quantities in which one quantity depends on the other.

fundamental: /fʌndəmentəl/ *adj.* necessary, essential for some process. ***same meaning*** *basic*.

temel

* Fundamental theorem of arithmetic states that every natural number grater than 1 can be written as a uniqe product of prime numbers.

G

general: /ʤenərəl/ *adj.* including the most basic or necessary information. ***see also*** *particular.*

genel

* -11, -19, -27, -35... general term of above sequence is; -8n-3.

geometric mean: /ʤi:əmetrık - mi:n/ *n.* it is the nth root of product of n numbers. ***see also*** *arithmetic mean, harmonic mean.*

geometrik ortalama.

* Geometric mean of 2,8 and 4 is $\sqrt[3]{2x4x8} = 4$

geometric sequence: /ʤi:əmetrık-si:kwənts/ *n.* is a sequence made by multiplying by some value each time. ***see also*** *arithmetic sequence.*

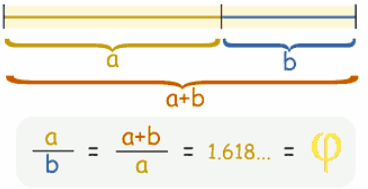
geometrik dizi

* 2, 4, 8, 16, 32, 64, ... is a geometric sequence, each number is 2 times the number before it.

geometry: /ʤiɒmətri/ *n.* the area of mathematics that deals with poins, lines, shapes and space. ***see also*** *plane geometry, solid geometry.*

geometri

* Geometry extensively uses Arithmetic and Algebra to arrive at the solutions of its problems.



golden ratio: /gəʊldən-reɪʃiəʊ/ *n.* the number approximately equal to 1.618. it is exactly equal to $(1+\sqrt{5})/2$.

altın oran

* Golden ratio is a natural. We can see its fluents ewerywhere, from seed to space. Plants, animals, humans was created with this ratio. Also Makkah is the golden ratio point of the Earth.

golden mean: /gəʊldən-miːn/ ***see*** *golden ratio.*

googol: /guːgɔːl/ n. is the number written as 1 followed by 100 zeros. 10,000,000,000,000,000,000,000, 000,000,000,000,000,000,000,000, 000,000,000,000,000,000,000,000, 000,000,000,000=1x10^{100}

googol

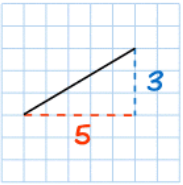
* One googol is presumed to be greater than the number of hydrogen atoms in the observable universe, which has been variously estimated to be between 10^{79} and 10^{81}.

googolplex: /guːgɔːlpleks/ *n.* is the number 10^{googol}.

googolpleks

* If a person want to write googolplex digits and he can write two digits per second, it would take around about 1.51×10^{92} years, which is about 1.1×10^{82} times the age of the universe. It is an awesome number.

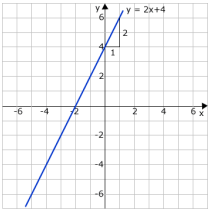
gradient: /greɪdiənt/ *n.* how steep a straight line is. ***same meaning*** *slope*.



eğim

*In this example gradient is 3/5=0.6

gram: /græm/ *n.* a metric unit of mass (weight). ***abbr*** *g.* ***see also*** *kilogram and tonne.*



gram

* A loaf of bread weighs about 200 grams.

graph: /grɑːf/ *n.* in statistics, it is a picture that represents data in organized manner. in algebra, it is a

line or curve drawn on a number line or coordinate plane.

grafik

* The figure shown is an example of a algebraic graph.

greatest common divisor: /greɪtɪst-kɑːmən-dɪvaɪzər/ *n.* is the greatest number that is a divisor of each of two or more given numbers without a reminder. ***abbr*** *GCD.* ***same meaning*** *greatest common factor(gcf) and highest common factor (hcf).*

en büyük ortak bölen (ebob)

*The GCD of 12 and 30 is 6, because 1,2,3 and 6 are factors of both numbers.

greatest common factor: /greɪtɪst kɑːmən fæktər/ ***see*** *greatest common divisor.*

gross: /grəʊs/ *adj.* the total weight, including contents, packaging, etc. ***see also*** *net.*

brüt

* My box's gross weight is 28 kg without their components, its net weight is 24 kg.

group: /gruːp/ **1.** *n.* a number of elements that are together in one place or are connected.

grup

2. *v.* to form a group or put elements into group or groups.

gruplama

*The numbers are grouped according to their values: positives and negatives.

guess: /ges/ *v.* to give an answer about something without all the facts. same meaning estimate.

tahmin etmek

*Guess the value of the limit by evaluating the function?

H

half: /hɑːf/ *n.* when the whole of something is divided into two equal parts, we call each part as half.

yarım.

* One half of the fruits is cherries and other half is oranges.

halves: /hɑːvz/ *plural form of* ***half.****(it is not an irregular plural noun but it looks different)*

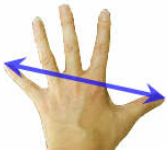
harmonic mean: /hɑːrmɑːnɪk-miːn/ *n.* this mean of a set of numbers is the number of items divided by the sum of the

reciprocals of the numbers. ***see also*** *arithmetic mean and geometric mean.*

harmonik ortalama

*Let's find the harmonic mean for the numbers 3 and 4. $\frac{1}{3} + \frac{1}{4} = \frac{7}{12}$, so harmonic mean = $\frac{2}{\frac{7}{12}} = \frac{24}{7} = 3.43$

hand span: /hænd-spæn/ *n.* the distance from the tip of the thumb to the tip of the little finger on your outstretched hand.



karış

* Average hand span of a man is 23 cm.

hect-: /hekt-/ *pref.* is equivalent to 100. ***see also*** *deca-.*

hekt-

* How many centimeters equal 1 hektometer?

hectare: /hekter/ *n.* is a unit of area equal to 10,000 m². Usually used to measure land. ***abbr*** *ha.*

hektar

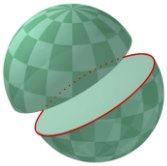
* The smallest international football field is therefore 0.62 ha and the largest one is 0.82 ha.

height: /haıt/ *n.* vertical distance from top of an object or shape to bottom. ***see also*** *length and width.*

yükseklik

* About how many handspans david would use to measure his toys height?

hemisphere: /hemısfır/ *n.* is the exact half of sphere.



yarım küre

* Surface area of a hemisphere of radius r, is given by $2\pi r^2$

hendecagon: /hendekəgən/ *n.* a polygon with 11 sides and equal number of angles.

onbirgen

* The measure of each each internal angle in a regular hendecagon is 147.27°.

heptagon: /heptəgən/ *n.* a polygon with seven sides is called a heptagon.

yedigen

* Choose a regular heptagon from the choices given.

hexagon: /heksəgən/ *n.* a polygon with 6 sides.

altıgen

* How many vertices does a hexagon have?

high: /haı/ *adj.* having a large distance from bottom to the top. ***see also*** *low.*

yüksek, yüksekliğinde

*It is ten metres high.

highest common factor: /haɪst-kɑːmən-fæktər/ ***see*** *greatest common divisor.*

histogram: /hɪstəgræm/ *n.* a graphical display of data that shows how frequently data occur within certain ranges or interval. see also bar graph.

histogram

* The histogram shown below gives the number of children visited a particular zoo.

horizontal: /hɔːrəzɑntəl/ *n.* going side to side, flat. ***see also*** *vertical*.

yatay.

* Horizontal axis is the x-axis on a graph.

hour: /aʊər/ n. a period of time equal to 1/24 of a day.

saat

* The numbers on the clock show the hours.

hour hand: /aʊər-hænd/*n.* the small hand in a clock that points to the hours. ***see also*** *minute hand*.

akrep (analog saatte)

* Hour hand goes once around the clock every 12 hours.

hundred: /hʌndrəd/ *n.* a group of 10 tens is equal to hundred.

yüz

* Numerical form of hundred is 100.

hundreds: /hʌndrədz/ n. in the third right digit of any whole number.. ***see also*** *ones and tens.*

yüzler (basamak)

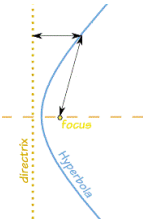
* 12,784; 7 shows us hundreds' place.

hundredth: /hʌndrədθ/ *n*. one part in a hundred equal parts. ($1/100^{th}$)

yüzde bir.

* 1 cent is a hundredth of 1 dollar.

hyperbola: /haɪpɜːbəl/ *n.* a special curve. it is shaped like an arch. ***see also*** *conic section.*



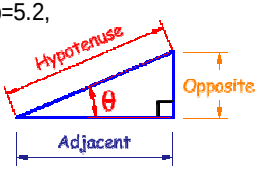
hiperbol

* The eccentricity (e) of a hyperbola is always greater than 1, e>1.

hypotenuse: /haɪpɒtənjuːz/ *n.* is the side opposite the right triangle. it is the longest side of a right triangle.

hipotenüs

* If a=3.9 and b=5.2, find the measure of the hypotenuse in the right angle.



hypothesis: /haɪpɒθəsɪs/ *n.* something that you accept as true without question or proof. ***same meaning*** *assumption.*

varsayım, hipotez

* The hypothesis that larger dogs are better at catching balls was about to be tested with 100s of different sized dogs.

I

i: /aɪ/ *sym.* the square root of minus 1 that is unit of imaginary number.

i.

* i, 12.3i, -i,3i/4... are examples of imaginary numbers.

identity element: /aɪdentəti-elɪmənt/ *n.* is a special type of element of a set with respect to a binary operation ***same meaning*** *neutral element.*

birim eleman

***** In addition, identity element is 0, for real numbers. In multiplication, 1.

identity function: /aɪdentəti-fʌŋkʃən / *n.* a function in which the domain values doesn't change at all, f(x)=x. ***abbr*** *id,* ***same meaning*** *identity map, identity relation.*

birim fonksiyon

* The identity function f on M is often denoted by id_M.

identity matrix: /aɪdentəti-meɪtrɪks/ **2.** *n.* it is a square matrix with 1 for each element on the main diagonal and 0 for all other elements. ***same meaning*** *unit matrix.* ***abbr*** *I.*

birim matris

* Next matrix is denoted I_4 because it is a 4x4 matrix.

$$I = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

illustrate: /ɪləstreɪt/ *v.* to give more information by use pictures.

resimle açıklamak

*The commutative property of multiplication can be neatly illustrated using an array.

imaginary axis: /ɪmædʒɪnəri-æksɪs/ *n.* is the y-axis of a complex. ***see also*** *real axis.* plane.

sanal eksen

* Identify the graph that represent the point P=2i on the imaginary axis.

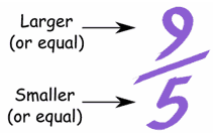
imaginary number: /ɪmædʒɪnəri-nʌmbər/ *n*. a number in the form of ai, where a is any real number and $i^2=-1$.
sanal sayı.
* $\sqrt{-4}=2i$ is an imaginary number.

imaginary part: /ɪmædʒɪnər-pɑːrt/ *n*. the part of complex number that has the square root of -1 as a factor. ***see also*** *real part.*
sanal kısım
* In the complex number 5+8i, the imaginary part is 8i.

imperial system: /ɪmpɪəriəl-sɪstɪm/ *see* ***UK imperial system***

impossible event: /ɪmpɑsəbəl-ɪvent/ *n.* an event that has no chance of occurring. the probability of an impossible event is always zero. ***see also*** *certain event*.
imkansız olay
* A bag contains 5 red balls and 3 green balls, so choosing a yellow ball is an impossible event.

improper fraction: /ɪmprɑpər-frækʃən/ *n.* is a fraction which the number in the numerator



greater than or equal to the number in the denominator. ***see also*** *proper fraction, mixed fraction.*
bileşik kesir
* Improper fractions aren't bad. sometimes they are comlex. It is easier to say "I ate 2 ½ bread" than "I ate 5/2 bread."

incenter: /ɪnsentər/ *n.* the center of a triangle's incircle.
iç teğet çemberin merkezi
* The angle bisectors meet in incenter.

inch: /ɪntʃ/ *n.* is a unit for measuring length. **inç**
* One inch is exactly 2.54 centimeters.

incircle: /ɪnsɜːrkəl/ n. the circle that fits the inside of a polygon. see also circumcircle.
iç teğet çember.
* For triangle, incircle is the largest circle contained in the triangle, it touches the three sides.

inclination: /ɪnklɪneɪʃən/ *n.* the angle between a line and x-axis.
eğim açısı
*All horizontal lines have angle of inclination 0°.

include: /ɪnkluːd/ *v.* to contain as parts of a group, set.
içermek
* (5,12] means from 5 to 12, don't include 5 but do include 12.

income: /ɪnkʌm/ *n.* money that you earn by working. ***see also*** *expense.*

gelir, kazanç

* You are working in a company and your starting income is $1200. Every year, the income will increase 5%. What is the total income on your 25th year in the company?

inconsistent: /ɪnkənsɪstənt/ *adj.* for system of equations or inequalities, It means no solution.

çözümsüz.

* x-y≤0 and x-y≥7, the system of inequalities is inconsistent.

increase: /ɪnkri:s/ *v.* it means rise, becoming greater or larger in amount, size, number or degree. ***see also*** *decrease.*

yükselmek, yükseltmek

* Tommy's weight increased from 40.5 kg to 51.25 kg.

indefinite: /ɪndefənət/ *adj.* not exact, without clear limits. ***see also*** *definite*

belirsiz

*An integral that without upper and lower limits is called an indefinite integral.

independent event: /ɪndipendənt ɪvent/ *n.* an outcome that is not affected by previous outcomes. ***see also*** *dependent event.*

bağımsız olay

* Tossing a coin. heads or tails is not affected by previous tosses.

independent variable: /ɪndipendənt veəriəbl/*n.* an input value of a function, it makes up the domain. ***see also*** *dependent variable.*

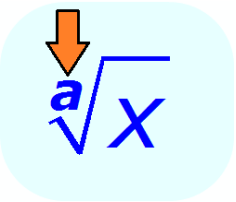
bağımsız değişken

* y=7x+5, the independent variable is x.

index: /ɪndeks/ **1.** n. exponent or power.

üs, kuvvet

2. a number or variable placed left of a radical sign.



kök derecesi

* If we don't write the index on the radical sign, it means; this is a square root.

induction: /ɪndʌkʃən/ *n.* is a method generally used to establish a given statement for all natural numbers. see also deduction.

tümevarım

* An implicit proof by mathematical induction for arithmetic sequences was introduced in the al-Fakhri writtenby al-Karaji around 1000 AD.

inequality: /ınikwɒləti/ *n.* is a mathematical sentence that uses symbols such as <, ≤, ≥, > to compare two quantities.
eşitsizlik
* -3<x<2, the compound inequality may be read as "x is greater than -3 and less than 2"

infinite: /ınfınət/ *n.* without an end, not finite. see also infinite.
sonsuz
* There are infinite whole numbers (0, 1, 2, 3, ...)

infinity: /ınfınəti/*n.* is a limitless quantity that is greater than every real numbers. the symbol for infinity is ∞.
sonsuzluk
* The symbol of infinity is called lemniscates.

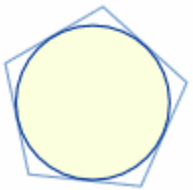
information: /ınfəmeıʃən/ *n.* facts about a situation.
bilgi
*This unit will help you to identify and use information in statistics.

initial: /ınıʃəl/ *adj.* of or at the beginning.
başlangıç
* PQ is a vector and P is the initial point of the vector.

injective: /ındʒektıv/*adj.* if for each element of range, there is a unique domain. ***same meaning*** *one-to-one function.* ***see also*** *bijective and surjective.*
birebir
* A={1,2,3} and B={a,b,c,d}, {(1,b)(2,c)(3,a)} is an injective function.

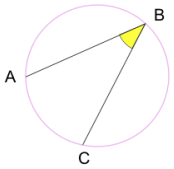
inradius: /ınreıdiəs/ ***see*** *apothem*

inscribe: /ınskraıb/ *v.* to draw on the inside of shape.***see also*** *circumscribe*.
içine çizmek



* Here a circle is inscribed in a regular pentagon.

inscribed angle: /ınskraıbəd-æŋgəl/ *n.* is defined as the angle formed by two chords that meet at the same point on a circle. ***see also*** *central angle.*
çemberde çevre açı



* The measure of an inscribed angle is half the measure of the central angle formed by using same points.

integer: /ɪntɪdʒər/ *n.* set of whole numbers and their opposites, with no fractional part. ***abbr*** ℤ.

tam sayı

* Set of integer includes the counting numbers, zero and the negative of the counting numbers.

intercept: /ɪntərsept/ *n.* the point at which a curve intersects an axis is known as an intercept.

kesişim noktası

* x-intercept is the x-coordinate of the point where a line crosses the x-axis.

interest: /ɪntrəst/ *n.* is a process, money paid for the use of other money.

faiz

* Joe invests $1000 and receives $50 in interest after a year.

interior angle: /ɪntɪəriər-æŋgəl/ *n.* an angle inside a shape, inside it by any two adjacent sides of polygon. ***see also*** *exterior angle.*

iç açı

* The sum of the measures of all the interior angles of a regular polygon is given by (n-2)x180, where n is the sides of the regular polygon.

international unit system: /ɪntərnæʃənəl-juːnɪt-sɪstəm/ *see* ***SI unit system***

interpret: /ɪntɜrprɪt/ *v.* to explain or decide what you think about something.

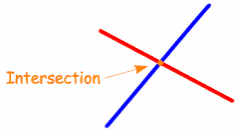
yorumlamak

*If you want to draw a graph, firsty you should interpret data.

intersect: /ɪntərsekt/ *v.* to cross over, cross each other or meet at a single point.

kesişmek

* The red and blue lines intersect.



intersection: /ɪntərsekʃən/ **1.** *n.* where; lines meet in a single point, planes meet in a line.

kesişim

2. *n.* intersection of sets is defined as the grouping up of the common elements of two or more sets. ***see also*** *union.* ***same meaning*** *cap.* ***denoted by*** ∩.

kümelerde kesişim işlemi

* When set A={1,2,3,7,11,13} and set B={1,4,7,10,13}, A∩B is all the common elements of the A and B. Therefore A∩B={1,7,13}.

interval: /ɪntəvəl/ *n.* a set of numbers consisting of all the numbers between a pair of given

numbers along with either, both, or none of the endpoints.

aralık

* The interval 2 to 4 includes numbers such as; 2.1, 3.78, 7/2, π.

inverse: /ɪnvɜːrs/ *adj.* opposite in effect, the reverse of operation, function...***see also*** *reciprocal.*

ters

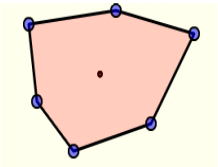
* The inverse of adding 9 is subtracting 9, the inverse of multiplying by 5 is dividing by 5.

irrational number: /ɪræʃənəl-nʌmbər/ *n.* irrational numbers are real numbers that cannot be expressed as fractions or decimals. ***abbr*** $\mathbb{Q}^{1}$. ***see also*** *rational number.*

irrasyonel sayılar

* √2, π, e, √10 are few examples of irrational numbers..

irregular polygon: /ɪregjʊlər-pɒlɪgən/ *n.* a polygon that does not have all sides equal and all angles equal.



düzgün olmayan çokgen

* An irregularpolygon can be either convex or concave.

isometry: /aɪsəʊmetri/ *n.* is a transformation in which the original figure and its image are congruent.

izometri, izdüşüm.

* Reflection, rotation and translation are isometries.

isosceles: /aɪsɒsəliːz/ *adj.* when two sides of a triangle or trapezoid are equal, is called isosceles. ***see also*** *equilateral*.

ikizkenar

* The diagonals of an isosceles trapezoid are equal.

K

kilo-: / kiːləʊ/ *pref.* used to denote the quantity in metric system, it also means one thousand.

kilo-

* We multiply by 1000 to convert kilometer to meter.

kilogram: /kɪləgræm/ *n.* is the unit of mass in the metric system. ***abbr*** *kg.*

kilogram

* Sarah weighs two kilograms more than Paula.

kiloliter: /kɪləʊliːtər/ n. is a metric unit to measure the volume or capacity of a large quantity of liquids. ***abbr*** *kl.*

kilolitre

* Which of the following could be the best estimate for the capacity of a water tank?

kilolitre: /kɪləʊliːtə/ ***see*** *kiloliter*

kilometer: /kɪlɒmɪtər/ *n.* is the unit of length in the metric system. ***abbr*** *km.*

kilometer

* Sandra drove for an hour and covered 33 kilometers.

kilometre: /kɪlɒmɪtə/ ***see*** *kilometer*

kilometer per hour: /kɪlɒmɪtər-pɜːr-aʊər/ *n.* is a unit for measuring both speed and velocity. ***abbr*** *km/h, kmph.*

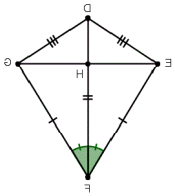
kilometre bölü saat

* This is a sign showing a speed limit of 50 km/h

kite: /kaɪt/ *n.* a 4-sided flat shape with two distinct pairs of adjacent sides that are congruent. ***same meaning*** *deltoid.*

deltoid

* Diagonals of a kite intersect at right angles.



L

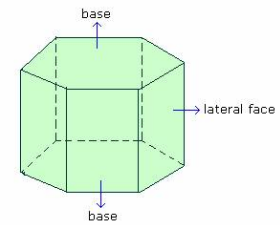
large: /lɑːrdʒ/ *adj.* big in size or amount. ***see also*** *big and small.*

geniş, büyük

* Googolplexian is one of the largest numbers.

lateral: /lætərəl/ *adj.* the faces or edges; lateral faces don't include the bases of a solid. lateral edges locate between two lateral edge.

yanal.



* In the figure; hexagonal prism has six lateral face and six lateral edges.

law of cosine: /lɔː ɑːv kəʊsaɪn/ ***see*** *cosine rule.*

least common denominator: /liːst-kɒmən-dɪnɒmɪneɪtər/*n.* is

the smallest number that can be used for all denominators of 2 or more fractions. ***abbr*** *LCD.*

en küçük ortak payda

* The LCD of ½ and 2/3 is 6, because they can be written as 3/6 and 4/6.

least common multiple: /liːst-kɒmən-mʌltɪpəl/ *n.* the smallest number that is a multiple of two or more numbers. ***same meaning*** *lowest common multiple, lowest common factor.* ***abbr*** *LCM.*

en küçük ortak kat.

* The LCM of 3 and 5 is 15, because 15 is a multiple of 3 and also a multiple of 5. Other common multiples include 30, 45... but they are not smallest.

leading coefficient: /liːdɪŋ-kəʊɪfɪʃənt/ *n.* in a polynomial, the coefficient of the term with the highest degree.

baş katsayı

* The leading coefficient of g(u)=11u-9u^2 is "-9".

left: /left/ *adj.* on or towards the side of your body that is to the west when you are facing north. ***see also*** ***r****ight*

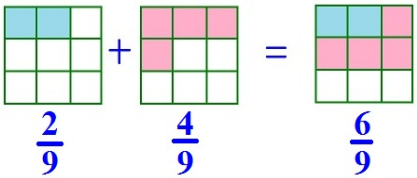
sol

* Look at the number line: -6 is to the left of -3.

length: /leŋθ/ *n.* is the distance from one end to the other end of an object.

uzunluk

* The length of normal classic guitar is about 1 meter.



like fractions: /laɪk-frækʃənz/ *n.* the different fractions with the same denominator. ***see also*** *unlike fractions.*

paydaları eşit kesirler

* 3/7 and 23/7 are like fractions, as they have the same denominator.

like terms: /laɪk-tɜːrmz/ *n.* the different terms with same variable.

benzer terimler

* 7x and $7x^2$ are not like terms but 7x and 2x are like terms.

likelihood: /laɪklihʊd/ n. is the probability chances of occurrence of an event. ***see also*** *probability.*

olasılık durumu

* The alphabets of the word 'MISSISSIPPI' are placed in a bowl. Pick S is the type of likelihood.

likely event: /laıkli / *adj.* the event that is probable to happen. ***see also*** *unlikely and equally likely.*

yüksek olasılıklı

* The probability of a likely event is generally between ½ and 1.

limit: /lımıt/ *n.* a value that you get closer and closer to, but never quite reach. ***abbr*** *lim.*

limit

*If you graphed out lim1/x, We would say "As x approaches infinity, then 1/x approaches 0".

line: /laın/ *n.* is a straight path that is endless in both directions.

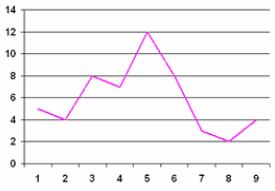
doğru

* A line does not have any thickness.

line graph: /laın-grɑ:f/ *n.* is a graph that uses line segments to connect data points and shows changes in data over time.

çizgi grafiği

* The line graph shows, the number of our shop's customers over 9 days.



line segment: /laın-segmənt/ *n.* part of a line connecting two points. it has definite end points.

doğru parçası

*Polygons can be obtained by joining line segments.

linear equation: /lınıər-ikweıʒən/ n. is an equation of the form ax+by=c, where a≠0 and b≠0.

lineer, doğrusal denklem

* The graph of a linear equation is a straight line.

liter: /li:tər/ *n.* a metric unit of volume. mostly used to measure liquids. ***abbr*** *l.*

litre

* Jugs usually has 1.5 liter of water in it.

litre: /li:tər/ ***see*** *liter.*

ln: /el en/ ***see*** *natural logarithm*

locus: /loʊkəs/ *n.* the set of all points whose coordinates satisfy a given equation or condition.

geometrik yer

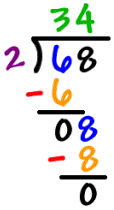
*A circle is the locus of points on a plane that are a certain distance from a central point.

logarithm: /lɔ:gərıθəm/ *n.* how many of one number need to be multiplied to get another number. ***see also*** *natural logarithm.* ***abbr*** *log.*

logaritma

* “How many 2s need to be multiplied to get 8?” this question can solve with logarithm. you can see the solution in following figure:

long division: /lɔːŋ-dɪvɪʒən/ *n.* is a standart division algorithm. it is suitable for dividing multidigit numbers that is simple enough to perform by hand. ***see also*** *short division.*



adım adım bölme işlemi

*Next operation shows us a long division. Actually 68÷2=34, it is really simple.

loss: /lɔːs/ *n.* a financial term, the income is less than expenses. ***see also*** *profit.*

zarar

* Two days ago our company received $3250 and expenses were $3300. It was a $50 loss.

low: /loʊ/ *adj.* not high, beow the usual level. ***see also*** *high.*

düşük, alçaklığında

* Low body temperature is a sign of a low metabolism.

lowest common multiple: /loʊəst-kɒmən-mʌltɪpəl/ ***see*** *least common multiple.*

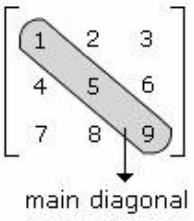
M

magnitude: /mægnɪtjuːd/ *n.* is the size of mathematical object, also is the length of the vector.

büyüklük

* The magnitude of a unit vector is 1.

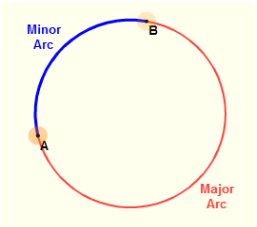
main diagonal: /meɪn -daɪægənəl/ *n.* main diagonal of a matrix consists of the elements of a square from the upper left element proceeding to the downright element diagonally.



asal köşegen

* The sum of the elements of the main diagonal of a matrix is called Trace of the matrix.

major /meɪdʒər/ *adj.* bigger or k-larger than others of the same type. ***see***



also *minor.*

major (büyük)

* The measure of major arc is always more than 180° or π radian.

mass: /mæs/ *n.* is the quantity of matter in an object. ***see also*** *weight.* ***abbr*** *m.*

kütle

* Mass is commonly measured by how much something weighs. But weight can change depending on where you are (such as the moon) while the mass stays the same.

math: /mæθ/ *short form of mathematics.* (general)

maths: /mæθs/ *short form of mathematics* (UK)

mathematics: /mæθəmætıks/ *n.* the study of the measurement, properties and relations of quantities and sets, using numbers and symbols.

matematik

* Mathematics is the reason of exist to this dictionary.

matrices: /meıtrısi:z/ *plural form of* ***matrix.***

matrix: /meıtrıks/ *n.* is a set of variables or constants in rows and columns in a rectangular or square array.

matris

* The following is a matrix with 2 rows and 3 columns.

$$\begin{bmatrix} 6 & 4 & 24 \\ 1 & -9 & 8 \end{bmatrix}$$

maximum: /mæksıməm/ *adj.* is the largest or greatest value in a set of data. ***abbr*** *max.* ***see also*** *minimum.*

maksimum

* Finding the maximum number is easy by arranging the numbers in ascending order.

mean: /mi:n/ *n.* is the average of numbers, a calculated central value of a set of numbers. ***same meaning*** *average.*

ortalama

* Mean is also called arithmetic mean because if we want to calculate mean of a set, we apply formula of arithmetic mean.

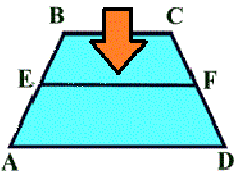
10 11 13 15 16 23 26

measure: /meʒər/*v.* to find a number that shows the size or amount of something.

ölçmek
* Here, this electronic scale is used to measure weight of eggs.

measurement: /meʒəmənt/ *n.* the act of measuring.
ölçü, ölçme
* Seven fundamental units of SI measurements are kilogram, metre, candela, second, ampere, Kelvin and mole.

median: /mi:diən/ **1.** *n.* is the middle data value of an ordered data set.
medyan, ortanca
2. *n.* is a line segment joining a vertex of the triangle to the midpoint of the opposite side of the triangle.
kenarortay
3. *n.* is a line segment between the midpoints of the legs of a trapezoid. ***same meaning*** *midline and midsegment.*



orta taban
* If there are two middle values, then the median is the mean of the two numbers.

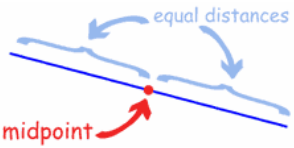
member: /membər/ *n.* any element of a set. ***same meaning*** *element.* ***abbr*** *∈.*
eleman
* Member of a set is always the subset of its parent set.

meter: /mi:ţər/ *n.* is a standart metric unit used for measuring the lengths of the objects.
metre
*The estimated length of a car is about 4 meters.

method: /meθəd/ *n.* a way of doing something, often one that involves a plan or problem.
metod, yöntem
* What is the best method for solving this problem?

metre: /mi:ţər/***see*** *meter*

metric system: /metrık sıstəm/ *n.* is a base ten system of measurement, it is the old form of SI unit system. ***see also*** *SI unit system.*
metrik sistem
* Tanya traveled a distance of 49.4 km. It is equal to 49400 m.



midpoint: /mıdpɔınt/ **1.** *n.* is a line segment joining a vertex of the triangle to the midpoint of the opposite side of the triangle.
kenarortay

2.*n.* is the point that is halfway between the endpoints of line segment.

orta nokta

* A line segment has only one midpoint.

mile: /maɪəl/ *n.* is an english unit used for measuring length or distance. ***abbr*** *mi.*

mil

* Stature mile and Nautical mile are two other units.

mile per hour: /maɪəl-pɜːraʊər/ *n.* describes the speed or velocity. ***abbr*** *mi/h, mph*.

mil bölü saat

* Ethan jogged 4½ miles in 45 minutes. His average speed is 6mph.

milli-: /mılı-/ ***pref.*** meaning one-thousandth (1/1000).

mili

* millimeter, milliliter, millisecond are 1/1000th of own units.

million: /mılјən/ *n*. one million is a quantity of 1,000,000 or one thousand thousand.

milyon

* Million can also be written as 10^6 in scientific notation.

minimum: /mınımәm/ *n.* is the smallest or the least value in a given set of data. ***abbr*** *min.* ***see also*** *maximum.*

minimum

* Finding the minimum number is easy by arranging the numbers in descending order.

minor: /maınər / **1.** *adj.* smaller or shorter than others of the same type. ***see also*** *major.*

minör (küçük)

2. *n.* if A is a square matrix, then the minor of the entry in the i-th row and j-th column (minor(i,j)) is the determinant of the submatrix formed by deleting the I-th row and j-th column. ***abbr*** M_{ij}. ***see also*** *cofactor.*

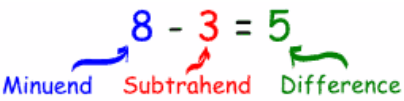
minör

* The sum of the measures of the major arc and the minor arc is equal to 360° or 2π radian.

minuend: /mınjuend/ *n.* the first number in a subtraction. ***see also*** *subtrahend and difference.*

eksiltilen sayı

* In following example, 8 is the minuend



minus: /maınəs/ **1.** *conj.* subtract, decrease by.

çıktı, eksi (çıkarma işlemi)
2. *adj.* it means negative, number or direction.
eksi , negatif
*What is the 59 minus 37?

minute: /mɪnɪt/ *n.* is a unit of time and is equivalent to 1/60 of an hour. ***see also*** *hour, second.*
dakika
* David has his piano class at 5 p.m. If the class continues for 45 minutes, when does class finish exactly?

minute hand: /mɪnɪt-hænd/ *n.* the large hand on a clock that points to the minutes. ***see also*** *hour hand.*
yelkovan (analog saatte)
* In the clock on the left, minute hand is just past 3.

mixed fraction: /mɪkst-frækʃən/ *n.* is a whole number and a fraction combined into one mixed number. ***see also*** *proper fraction and improper fraction.*
tam sayılı kesir.
*The mixed number 2 ½ is equivalent to improper fraction 5/2.

mixed number: /mɪkst-nʌmbər/ ***see*** *mixed fraction*

mode: /məʊd/ *n.* the number which appears most often in a set of numbers. ***see also*** *median and mean.*
mod
* In 6,3,9,6,6,5,9,3; the mode is 6. it occurs most often.

model: /mɒdəl/ *n.* is a description of a system using mathematical concepts and language.
model
* Mathematical models are used especially natural sciences and engineering disciplines but also in the social sciences.

modular arithmetic: /mɒdjʊlər-ərɪθmətɪk/ *n.* is a system of arithmetic for integers, where numbers wrap around upon reaching a certain value. ***same meaning*** *clock arithmetic.*
modüler aritmetik
*The modern approach to modular arithmetic was developed by Carl Friedrich Gauss.

modulo: /mɒdjuləʊ/ *n.* in number theory, it is an equivalence statement, is the reminder of the Euclidean division. if two things are equivalent, they are the same up to a reminder. ***abbr*** *mod.*

modül (mod)
*for c = a (mod b) or a mod b =c; we should say “a modulo b is congruent to c.”

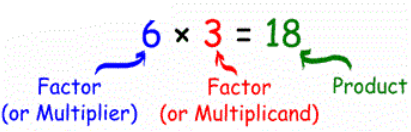
modulus: /mɒdjʊləs/ **1.** *n.* in modular arithmetic, we can see in modulo operation. for a mod b = c, b is the modulus.
modül
2. *n.* is value of a number expressed as a positive number. ***same meaning*** *absolute value*.
mutlak değer, modül
3. *n.* is the distance of the complex number from the origin in a complex plane.
karmaşık sayının modülü (uzaklığı)
*|z| is the modulus of z, z=x+iy; $|z|=\sqrt{(x^2+y^2)}$

monomial: /mɒnəʊmiəl/ *n.* is an algebraic expression containing only one term. ***see also*** *binomial, trinomial, polynomial.* **bir terimli polinom**
* A monomial should not have negative and fractional exponents.

month: /mʌnθ/ *n.* it takes approximately 30 days for the moon to orbit the earth and this time period is called month. ***see also*** *day week and year.*
ay
* I am the sixth month of the year, what is my name?

multiple: /mʌltɪpəl/ *n.* the product of a number with any integer is called the multiple of that number.
kat
*The multiples of 6 are 6, 12, 18, 24, 30, 36...

multiplicand: /mʌltɪplɪkænd/ *n.* the number that gets multiplied, one of the factors. ***see also*** *multiplier, factor and product.*
çarpılan
* 6x3=18, 3 is a multiplicand but we



usually use factor, for both of them.

multiplication: /mʌltɪplɪkeɪʃən/ *n.* is the repeated addition of one number to the number of times equal to the other number.
çarpma işlemi
* To multiply 4 with 5, 4 can be added 5 times. 4+4+4+4+4=20.

multiplication tables: /mʌltɪplɪkeɪʃən-teɪbəlz/ *n.* a table that shows you the results of multiplying two numbers. ***same***

meaning *times tables*. **çarpım tablosu**

5 times table	6 times table	7 times table	8 times table
1 x 5 = 5	1 x 6 = 6	1 x 7 = 7	1 x 8 = 8
2 x 5 = 10	2 x 6 = 12	2 x 7 = 14	2 x 8 = 16
3 x 5 = 15	3 x 6 = 18	3 x 7 = 21	3 x 8 = 24
4 x 5 = 20	4 x 6 = 24	4 x 7 = 28	4 x 8 = 32
5 x 5 = 25	5 x 6 = 30	5 x 7 = 35	5 x 8 = 40
6 x 5 = 30	6 x 6 = 36	6 x 7 = 42	6 x 8 = 48
7 x 5 = 35	7 x 6 = 42	7 x 7 = 49	7 x 8 = 56
8 x 5 = 40	8 x 6 = 48	8 x 7 = 56	8 x 8 = 64
9 x 5 = 45	9 x 6 = 54	9 x 7 = 63	9 x 8 = 72
10 x 5 = 50	10 x 6 = 60	10 x 7 = 70	10 x 8 = 80
11 x 5 = 55	11 x 6 = 66	11 x 7 = 77	11 x 8 = 88
12 x 5 = 60	12 x 6 = 72	12 x 7 = 84	12 x 8 = 96

*In multiplication tables, the product of two numbers are shown where the row and the column meet.

multiplicative identitiy : /mʌltıplıkətıv-aıdentəti/ *n.* identitiy of multiplication, one. ***see also*** *additive identity.*

çarpmada birim eleman

* 59x1=59 (As the number is multiplied by 1, the result is the number itself)

multiplicative inverse: /mʌltıplıkətıv-ınvɜ:s/ n. inverse number of multiplication, the reciprocal of number. ***same meaning*** *reciprocal (adj).* ***see also*** *additive inverse.*

çarpmada ters eleman

*The multiplicative inverse of a is denoted “1/a”

multiplier: /mʌltıplaır/ *n.* the number that you are multiplying by. ***see also*** *multiplicand, factor and product.*

çarpan

*6x3=18, 6 is a multiplier but we usually use factor, for both of them.

multiply: /mʌltıplaı/ *v.* the basic idea of multiplication, to add a number to itself a particular number of times.

çarpmak

*If you multiply seven by 15, you get 105.

N

natural logarithm: /nætʃərəl-lɒgərıθəm/ *n.* a logarithm to the base “e”. e is an irrational constant whose approximately equal to 2.71. .

doğal logaritma, ln

* The equation $24=e^{6x}$ can be solved using natıual logarithm.

natural number: /nætʃərəl-nʌmbər/ *n.* all the counting numbers 1,2,3, and so on... ***abbr*** *ℕ.* ***see also*** *whole, integers, rational, irrational numbers.*

sayma sayıları

* Natural numbers are a subset of the whole numbers.

negative: /negətıv/ *adj.* less than zero. negative numbers are written

with a minus sign in front. ***see also*** *positive*

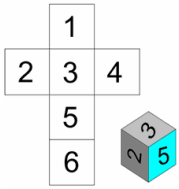
negatif, eksi (sayılarda)

* Negative exponents are used in scientific notation to designate a number smaller than one.

net: /net/ **1.** *n.* a diagram, is the two-dimensional pattern of a three-dimensional figure that can be folded to form the figure.

üç boyutlu cismin açılımı

2. the weight of the contents not including any packaging, etc. ***see also*** *gross.*



net

* If we fold this net, we get a cube.

nine: /naın/ *n.* a numerical value. it occurring after eight and before ten.

dokuz

* Children believe; a cat has nine lives.

non-euclidean geometry: /nɒn -juklıdiən-dʒiɒmətri/ *n.* is a branch of geometry which does not hold parallel postulate.

euclid dışı geometri

* Hyperbolic and elliptic geometry are non-Euclidean geometries.

nonagon: /nɒnəgən/ *n.* a 9-sided polygon. It is a flat with 9 straight sides.

dokuzgen

*one side of regular nonagon is n cm, the perimeter equals 9xn.

normal: /nɔ:rməl/ *adj.* in geometry; a vector, perpendicular to a surface.

normal

* If the surface isn't flat, you can imagine a plane sitting on the surface, and draw a normal to that plane.

normal distribution: /nɔ:rməl dıstrıbju:ʃən/ *n.* a continuous distribution of a random variable with its median mode and mean equal. ***see also*** *bell curve.*

normal dağılım

* Parametric tests can only be used on data which has a normal distribution.

notation: /noʊteıʃən/ *n.* a system of symbols to represent special things.

gösterim

* In mathematical notation "∞" means "infinity".

nought: /nɔ:t/ ***see*** *zero*

null: /nʌl/ *n.* zero quantity of expressions, nothing. ***see also*** *zero, cipher, cyper,* nought.

boş, sıfır
* Null is from latin word “nullus”, it means “none”.

number: /nʌmbər/ *n.* a symbol that can be derived by counting.

sayı, numara.
* There are different types of numbers, such as whole numbers, decimals, integers, and more.

number line: /nʌmbər-laın/ *n.* a line with numbers placed in their correct position.
sayı doğrusu
* Usually a number line is marked showing integer values.

numeral: /nju:mrəl/*n.* is a symbol used to represent a number.
rakam, sayı ile ilgili
* The number 5 in Roman numerals can be represented as V.

numerator: /nju:məreıtər/ *n.* in a fraction, the number written above the vinculum. ***see also*** *denominator and vinculum.*
pay
* The numerator of the fraction can also be called as the dividend of fraction.

numerical: /njumerıkəl/ *adj.* relating to a number or series of numbers.
sayısal
* This alphabet, written out with the same numerical values as the Arabic.

O

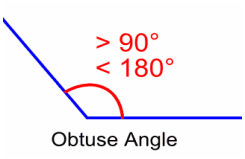
object: /ɑ:bdʒekt/ *n.* a thing that physical existence.
cisim, nesne
*This application works with many types of geometric objects. For example, vectors, axes, lines, curves, functions, arcs... etc.

oblique: /oʊbli:k/ *n.* the lines that is slanting.
eğik
* Oblique lines are neither vertical nor horizontal

oblong: /ɑ:blɔ:ŋ/ ***see*** *rectangle*

obtuse angle: /ɑ:btju:s æŋgəl/ *n.* any angle greater than 90° and less than 180° is called an obtuse angle. ***see also*** *acute right and straight angle.* **geniş açı**
* Obtuse angle is between a right angle and a straight angle.

obtuse triangle: /ɑːbtjuːs-traɪæŋgəl/ *n.* a triangle in which one of the angles is obtuse angle. ***see also*** *acute and right triangle.*



geniş açılı üçgen

* It has one obtuse angle and two acute angles.

occur: /əkɜːr/ *v.* to happen, often without being plan.

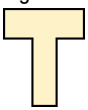
meydana gelmek, oluşmak

*Fractals are naturally occurring. We can see them in the nature.

octagon: /ɑːktəgən/ *n.* a polygon with eight sides is called an octagon.

sekizgen

* The figure shows an octagon. All its sides don't measure the same.



odd number: /ɑːd-nʌmbər/ *n.* any integer that cannot be divided exactly by 2. ***see also*** *even number.*

tek sayı

* -3, 1, 75 and -913 are all odd numbers.

once: /wʌnts/ *adv.* one time, multiplied by one. ***see also*** *twice and thrice.*

bir kere

* Cem feeds his dog once a day.

one: /wʌn/ *n.* a numerical value equal to 1.

bir

* One is the first number in the set of natural numbers.

one-to-one function: /wʌn-tu-wʌn fʌŋkʃən/ ***see*** *injective*

ones: /wʌns/ n. in the last right digit of any whole number. ***same meaning*** *units.* ***see also*** *tens and hundreds.*

birler (basamak)

* 784, 4 shows us ones' place.

operation: /ɑpəreɪʃən/ *n.* a mathematical process applied to solve a problem.

işlem

* Addition, subtraction, multiplication and division are the four basic operations but there are many more such as square root...

operator: /ɑːpəreɪtər/ *n.* is a symbol that represents an operation. **işleç**

* Operation signs are operators. It says "what do you want to do with values?".

opposite: /ɑːpəzɪt/ *adj.* in a position facing something but on the other side.

zıt

*Two numbers that have the same magnitude but are opposite in signs are called opposite numbers. For example, 25 and -25.

order: /ɔːrdər/ **1.** *v.* arranging the things or numbers in a well-defined manner.

sıralamak

2. *n.* arrangement ***same meaning*** *sequence.*

sıra, dizi

* Which list shows the numbers 68, 239, 294 and 141 ordered from greatest to the least?

ordered pair: /ɔːrdərd-pæər/ *n.* a pair of numbers used to locate a point on a coordinate plane.

sıralı ikili

* Ordered pair is written in parenthesis like this: (x,y)

ordinal number: /ɔːrdnəl-nʌmbər/ *n.* a number that tells the position of something in a list. ***see also*** *cardinal number.*

sıra sayısı

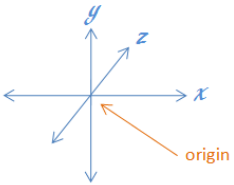
* Only whole numbers are used to represent ordinal numbers such as first, second and third.

ordinate: /ɔːrdənət/ *n.* is the value of the y-coordinate on a coordinate plane. ***see also*** *abscissa.*

ordinat

* The ordinate of the ordered pair of point P(1,4) is 4.

origin: /ɔːrɪdʒɪn/ *n.* is the point of intersection of x and y axis. ***abbr*** *o.*



orjin

* The coordinates of the origin are (0,0).

orthocenter: /ɔːrθəsentər/ *n.* the point of intersection of the altitudes of a triangle.

üçgende yüksekliklerin kesişim noktası

* In a right triangle, the orthocenter lies at the vertex containing the right angle.

orthogonal: /ɔːrθɑgənəl/ *adj.* relating to consistinf of right angles. ***see also*** *vertical.*
ortagonal, dikey biçimde, dik açılı
* The axes of Cartesian coordinate system are orthogonal, they are perpendicular to each other.

ounce: /aʊnts/ **n.** is the unit for measuring weight in the imperial system. ***abbr*** *oz.*
ons
* Weight of apple can be measured by using ounces.

outcome: /aʊtkʌm/ *n.* a possible result of a probability experiment.
sonuç (olasılık)
* Head is a possible outcome when a coin is tossed.

outlier: /aʊtlaɪr/ *n.* a value or element that distinctly stands out from the rest of the data.
aykırı değer
* An outlier in the list 14, 9, 17, 12, 99, 32, 23 is 99.

oval: /əʊvəl/ *n.* an egg-shaped curve. ***same meaning*** *ovoid.*
oval
* Oval is derived from Latin word "ovus" meaning egg.

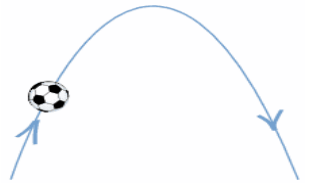
ovoid: /əʊvɔɪd/ ***see*** *oval.*

P

pair: /peər/ *n.* two objects that are similar in form or function and are used together.
çift, ikili
* Coordinate pair x and y is represented as {x,y}.

palindromic number: /pælɪndrɒmɪk nʌmbər/ *n.* a number that will be the same when it is written forwards or backwards.
palindromik sayı, tersten okunuşu aynı olan sayı
* 101, 1221, 17871 etc. are few examples of palindromic numbers.

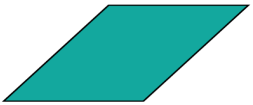
parabola: /pəræbələ/ *n.* a special curve, shaped like arch. it is one of the conic section.
parabol
* All parabolas have an axis of symmetry and vertex. Vertex lies half way between the focus and directix.



parallel: /pærəlel/ *adj.* designating two or more straight lines, planes or something that do not insect.

paralel

* Parallel lines have same slope.



parallelogram: /pærəleləgræm/ *n*. is a 4-sided flat shape with straight sides where opposite sides are parallel. ***see also*** *rhombus.*

paralelkenar

* The diagonals of a parallelogram bisect each other.

parameter: /pəræmıtər/ *n.* a vlalue that is already "built in" to a function. see also coefficient.

parametre.

* One tree have a growth rate of 20 cm per year. Its function is h=20x(year), then year is a variable and 20 is a parameter.

parentheses: /pərentθəsi:z/ *plural form of* ***paranthesis.***

parenthesis: /pərentθəsıs/ *n*. is one of the "( )" symbols used in pairs to group things together. ***same meaning*** *round braces.* ***see also*** *braces and brackets.*

parantez

* (3+2)x(6-4)=5x2 In this case, parentheses group 3 and 2 together, and 6 and 4 together.

part: /pɑ:rt/ *n.* a fraction of a whole, a portion. ***see also*** *whole*.

parça, kısım

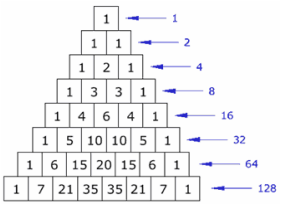
*Days are parts of week.

particular: /pətıkjʊlə/ *adj.* known only to a special thing. specific. see also general.

özel

* What is the difference between a general ssolution and a particular solution of a differential equation?

pascal's triangle: /pæskəls traıæŋgəl/ *n.* the arrangement of the binomial coefficients in a pattern of triangle. ***see also*** *binomial theorem.*



pascal üçgeni

* Pascal lived in 17th century but in 11th century Omar Khayyam and in 13th century Yang Hui presented the same triangle. Also in 16th century Petrus Apianus, from Greece and Niccolo Tartaglia, from Italy published the triangle.

pattern: /pætərn/ *n.* a set of numbers or objects that are arranged following a rule or rules.

örüntü

* The previous pattern contains 2 identical groups with each group have 3 different images: a star followed by a bar and then three dots.

pentagon: /pentəgɑːn/ *n.* is a polygon with five sides.

beşgen

* What is the measure of each angle of a regular pentagon?

per: /pɜːr/ *prep.* used in expressing ratios of units instead of divided by.

bölü

*25miles/gallon is pronounced “25 miles per gallon”.

percent: /pərsent/ *n.* it means a part per hundred. *denoted by* %.

yüzde

* A resolution must receive fifty-one percent of the votes pass.

percentage: /pərsentɪdʒ/ *n.* an amount of something, expressed as a number out of 100.

yüzde oranı

*The percentage of people who are left-handed is only about 10%.

perfect number: /pərfekt nʌmbər/ *n.* it is a number that sum of the proper divisors of a number is equal to the number itself.

mükemmel sayı

* 6 is one of the perfect numbers. Its divisors are 1, 2 and 3; 1+2+3=6.

perigon: /perɪgɑn/ ***see*** *full angle*

perimeter: /pərɪmɪtər/ n. is the distance around a two dimensional shape. ***see also*** *circumference.*

çevre

* Perimeter of a rectangle can also be foud using the formula 2(l+w), where “l” is the length and “w” is the width.

period: /pɪriəd/ **1.** *n.* having a graph that repeats after a fixed interval of variable.

periyot

2. *n.* each groups of three digits in a number.

bölük

3. *n.* a length of time.

dönem

4. *n.* a punctuation mark "." ***same meaning*** *point.*

nokta

*What symbol is used to separate periods?
It is comma. For example: 23,455,001

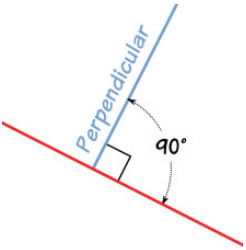
permutation: /pɜ:mjuteıʃən/ *n.* is an ordered arrangement of a group of objects. ***see also*** *combination.*

permutasyon

* The permutation of pick top 3 goals out of 10 (order is important) is: 10!/7!=720

perpendicular: /pɜ:pəndıkjʊlər/ *adj.* at right angle to.

dik



* In most houses, the walls are perpendicular to the floor.

pi: /paı/ *n.* the ratio of circumference of a circle to its diameter, equal to 22/7=3.14159265...

pi

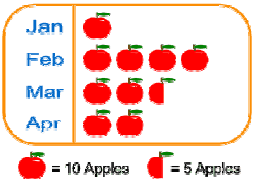
* Pi (π) is the 16th letter of the Greek alphabet.

pi notation: /paı-noʊteıʃən/ *n.* it represents the product of bunch terms. ***see also*** *product and sigma notation.*

çarpım sembolü

* Pi notation is used the same way as the sigma notation described above, expect that succeeding terns are multiplied instead of added.

pictograph: /pıktəʊgrɑ:f/ *n.* uses pictures or symbols to show the value of data.



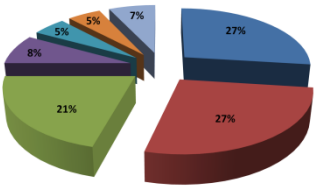
piktograf, resim-grafik

* The pictograph shows 9 full apples and a half apple. It means 95 apples.

pie chart (graph): /paı tʃɑ:rt/ *n.* is a circular chart divided into sectors, each sector shows the relative size of each value.

pasta grafiği

* Pie charts are used to show data in proportion.



place value: /pleɪs vælju:/ *n.* is the value given to the place or position of a digit in a number, such as tens, tenths...

basamak değeri

* The place value of 4 in 1035.846 is hundredths.

plane: /pleɪn/ *n.* a flat surface that extends into in all directions.

düzlem

* A plane has infinite width and length, zero thickness and zero curvature so it is also called two-dimensional surface.

platonic solid: /pləta:nık sɑ:ləd/ *n.* is a regular convex polyhedron with congruent faces of regular polygon. There are five of them.

platonik katı cisim

* There are named after Plato, a famous mathematician. Cube and dodecahedron are well-known.

plot: /plɑ:t/ *v.* to draw on a graph, coordinate plane.

grafikte göstermek

* Plotting gives the exact position of a point on a coordinate grid.

plus: /plʌs/ *n.* the symbol of addition is called plus (+). ***see also*** *minus.*

artı

* Plus sign is also used to denote positive numbers.

point: /pɔɪnt/ *n.* an exact location, it has no size, only position. ***see also*** *comma*

nokta

* A point is 0-dimensional. It means with no measurable quantity.

polar axis: /poʊlər æksıs/ *n.* in polar coordinate system is a fixed axis which polar angle is measured.

kutupsal eksen

* Polar axis is similar to the positive x-axis of the Cartesian coordinate plane.

polar coordinates: /poʊlər kəʊɔ:dınəts/ n. is a 2-dimensional coordinate system which each point on a plane is determined by a distance from a fixed point and an angle from a fixed direction. ***see also*** *cartesian coordinates and complex plane.*

kutupsal koordinatlar

* Polar axis of a polar coordinate system is a ray. End point is the pole, 0.

polygon: /pɑ:ligɑ:n/ *n.* is a closed plane shape made up of 3 or more line segments.

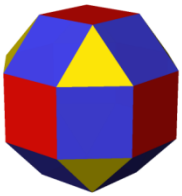
çokgen

* Polygons have special names depending on the number of lines forming their boundary. For example, a polygon

with three sides is called a triangle.

polyhedra: /pɑːlihiːdrə/ *plural form of* ***polyhedron***

polyhedron: /pɑːlihiːdrən/ *n.* is a space shape each of whose faces is a polygon.



çok yüzlü cisim

* Cubes, prisms and pyramids are polyhedral.

polynomial: /pɑːlinəʊmiəl/ n. an expression that can have constants, variables and exponents. monomial or more than two monomials. ***see also*** *monomial, binomial and trinomial.*

polinom

* In a polynomial; no division by a variable, it can't have an infinite number of terms and an exponent of variable can only be a whole number.

population: /pɑːpjuleɪʃən/ *n.* the whole group from which a sample is taken. see also sample.

evren (istatistiksel)

* A population includes each element from the set of observations that can be made.

position: /pəzɪʃən/ *n.* where something is located.

konum

* The position of triangle; it is located below the square.

positive: /pɑːzəţv/ *adj.* any real number greater than zero. ***see also*** *negative.*

pozitif, artı (sayılarda)

* Positive numbers are marked to the left of zero on a number line.

possibility: /pɑsəbɪləti/ *n.* the fact or state of being possible. ***see also*** *probability.*

ihtimal, olasılık, olanak

* Bankruptcy is always a possibility.

postulate: /pɑːstjuleɪt/ *n.* is a true statement, which does not require to be proved. ***see also*** *theorem and axiom.*

postulat

* Euclid was a Greek mathematician who is known with his postulates.

pound: /paʊnd/ **n.** is the unit for measuring weight in the imperial system. ***see also*** *ounce.*

pound

* 1 pound is about the weight of 3 medium-sized bananas.

power: /paʊər/ *n.* the power of a number says how many times to use that number in a multiplication. ***same meaning*** *exponent and index.*

üs, kuvvet

* Anything raised to the power 0 is equal to 1.

predecessor: /priːdɪsesər/ *n.* something which comes before something in an order. ***see also*** *successor.*

önceki

*The predecessor of 1 is 0, predecessor of 0 is -1 so on.

precision: /prɪsɪʒən/ *n.* is how close the measured values are to each other. ***see also*** *accuracy.*

kesinlik

* If you are playing soccer and you always hit the goal post; you are precise but you are not accurate.

prime: /praɪm/ *adj.* is a positive integer that has exactly two factors, 1 and number itself.

asal

* There are infinitely many prime numbers.

principal: /prɪntsəpəl/ **1.** *n.* the total amount of money borrowed or invested, not including any interest or dividends.

anapara, sermaye

2. *adj.* first in importance, a main part in a situation.

ana, esas

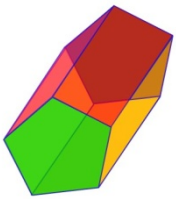
* We can calculate the principal when we know the interest, rate and time.

principle: /prɪntsəpəl/ *n.* a rule, a fundamental assumption.

prensip, ilke

* You can't change that basic principle.

prism: /prɪzəm/ *n.* a solid object, polyhedron, that has two identical ends (bases) and all flat sides. ***see also*** *pyramid.*



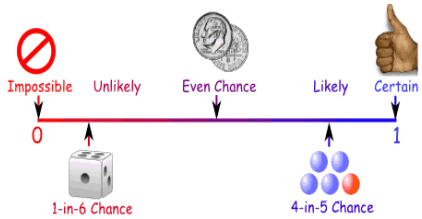
prizma

* Cube is a special kind of rectangular prism.

probability: /prɑbəbɪləti/ *n.* is the chance that something will happen, how likely some event will happen. ***see also*** *possibility*.

olasılık, ihtimal

* Sometimes you can measure a probability with a number or you can use words such as impossible, unlikely, possible, even chance, likely and certain.



problem: /prɑbləm/ *n.* a question that needs a solution.

problem

* - Why are math books always unhappy?
+ Because, they have a lot of problems. ☺

product: /prɑdʌkt/ **1.** *n.* the result of operation of multiplication. ***see also*** *factor*

çarpım

2. *n.* an operator for the product of a sequence. denoted by Π. ***see also*** *summation.*

çarpım (dizi)

* When 3 and 6 are multiplied, the product is 18.

profit: /prɑ:fət/ *n.* a financial benefit, income is greather than expenses. ***see also*** *loss.*

kâr

* Sam's Café received $600 yesterday, but expenses such as wages, food and electricity came to $450. So profit was $150.

proper fraction: /prɑpər-frækʃən/ *n.* is a fraction where the numerator is less than denominator. ***see also*** *improper and mixed fractions.*

basit kesir

* The value of a proper fraction is always less than 1.

property: /prɑpərti/ *n.* a character or attribute that something has. such as color, height, etc.

özellik

* It is blue and it has 5 regular sides

proportion: /prəpɔ:ʃən/ *n.* is an equation written in the form $\frac{a}{b} = \frac{c}{d}$ stating that two ratios are equivalent. ***see also*** *ratio.*

orantı

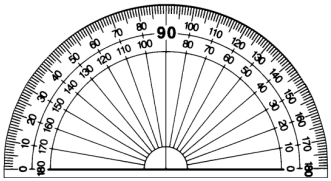
* $\frac{4}{16} = \frac{1}{4}$ is an example of proportion. we can confirm this equation to use cross multiply: 4x4=1x16.

proportional: /prəpɔ:rʃənəl/ *adj.* two or more quantites have the same ratio. see also same and similar.

orantılı

* If the weight is proportional to age, then a weight of 3kg on the 1st year means it will weigh 6kg on the 2nd year, 9kg on the 3rd year.

protractor: /proʊtræktər/ *n.* is a tool used to measure the angles.



açıölçer

* Some of the protractors are half circle protractors to measure angles up to 180° and some of them are full circle.

pyramid: /pɪrəmɪd/ n. is a polyhedron with a polygonal base and triangles for sides. It has an apex. ***see also*** *prism.*

piramit

* There are 4 triangular faces in a rectangular pyramid.

pythagorean theorem: /paɪθægərɪən-θiːərəm/ *n.* in a right angle triangle, the square of the hypotenuse is equal to the sum of the squares of the other two sides.

pisagor teoremi

* 3-4-5, 5-12-13 and 8-15-17 are examples of pythagorean theorem. For example: $3^2 + 4^2 = 5^2$.

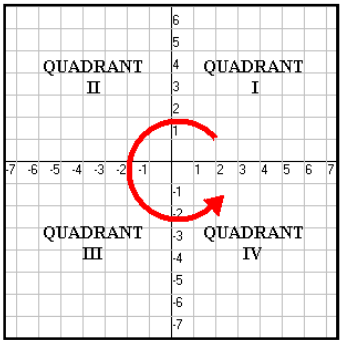
Q

quadrangle: /kwɑdræŋgəl/ ***see*** *quadrilateral*

quadrant: /kwɑːdrənt/ **1.** *n.* a quarter of a circle. ***see also*** *semicircle.* **çeyrek çember**

2. *n.* any of the 4 equal regions in the cartesian coordinate system. **kartezyen koordinat bölgesi (1. bölge, ..., 4.bölge)**

* The point (3,-8) is in the fourth quadrant.



quadratic equation: /kwɑdrætɪk-ikweɪʒən/ *n.* an equation where the highest exponent of the variable is a square. ***see also*** *cubic equation.* **ikinci dereceden denklem**

* The name quadratic comes from "quad". It means square, because the variables gets squared (like x^2)

quadrilateral: /kwɑdrɪlætərəl/ *n.* is a four-sided polygon. ***same meaning*** *tetragon, quadrangle*. ***see also*** *triangle and pentagon.*

dörtgen

* Parallelogram, rhombus, rectangle, square and trapezoid are different kinds of quadrilateral.

quadrillion: /kwɑdrɪljən/ *n.* is a number. a quadrillion can be shown as $1x10^{15}$.

katrilyon

* There are two systems in use for naming numbers larger than a million. British quadrillion is different. It is 10^{24}.

qualitative data: /kwɑlɪtətɪv-deɪtə/ n. is describes information, something without numbers. ***see also*** *quantitative data.*

kategorik (kalitatif) veri

* The sentence of "it was great fun." is an example of qualitative data.

quantitative data: /kwɑntɪtətɪv-deɪtə/ *n.* the data that can be counted or measured. ***see also*** *qualitative data, continuous and discrete data .*

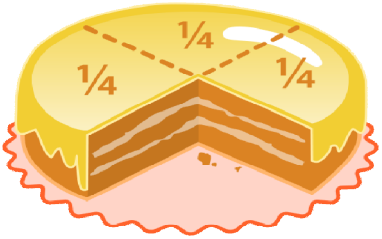
numerik (kantitatif) veri

* "Number of vehicles sold from a shop in a month." is the quantitative data.

quantity: /kwɑ:ntəti/ *n.* how much there is of something.

miktar

* "What is the quantity of rice?" You could say "a handful" or count them "1254".



quarter: /kwɔ:rtər/ *n.* one of the four equal parts a whole is divided into. ***see also*** *half and whole.*

çeyrek

* Quarter is also a coin used in many countries like U.S.

quartile: /kwɔ:rtaɪl/ *n.* is a value that divide a set of data into four equal parts. It is known as Q_1, Q_2 and Q_3.

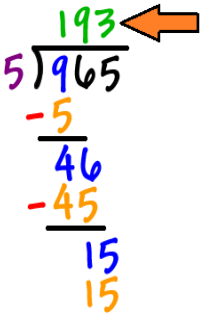
dörttebirlik, kartil

* A data set has three quartiles; lower, middle (median) and upper quartiles.

quotient: /kwəʊʃənt/ n. the answer after you divide one number by another. ***see also*** *dividend, divisor and remainder.*

bölüm

* The number 16, when divided by 3, has a quotient of 5 and the remainder as 1.



R

radian: /reɪdiən/ *n.* is a unit used for measuring angles. one radian is 180/π degrees or about 57.296°.
radian

* A right angle is π/2, a straight angle is π radians.

radical: /rædɪkəl/ *n.* the symbol √, which is used to represent the root of a number. ***see also*** *radicand and index.*
kök işareti

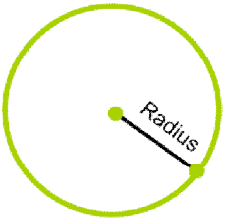
* What is the radical form of $x^{\frac{1}{5}}$?

radicand: /rædɪkænd/ *n.* the value inside the radical sign. ***see also*** *radical and index.*
kök içindeki ifade

* The radicand in the expression $\sqrt[3]{5}$ is 5.

radii: /reɪdiaɪ/ *plural form of* ***radius***

radius: /reɪdiəs/ **1** *n.* is the distance from the center of a circle to any point on the circle. ***see also*** *diameter.*
yarıçap



2. *n.* is a line segment joining the center of a sphere with any point on the sphere.
kürenin yarıçapı
3. *n.* the distance from the center to a corner point of a regular polygon. ***see also*** *apothem.*
düzgün çokgende merkez-köşe uzaklığı

* Find the radius of a circle with area 153.86 meter square. (Take π=3.14)

radix: /reɪdɪks/ **1.** *n.* how many numbers used in a number system. ***see also*** *base.*
taban eleman sayısı (sayı sistemi) **2.** *n.* the number that is going to be raised to a power in the exponents ***same meaning*** *base.*
taban (üslü sayı)

* In the decimal number system, radix is 10: {0,1,2,3,4,5,6,7,8,9}

raise: /reɪz/ *v.* when one number is raised over another number, it becomes exponent.

derecelendirmek (üs olarak)

* To raise m to the power of 3 means m^3.

random: /rændəm/ *n.* without order, happening by chance.

rastgele

* If I throw two dice, they will give random results, but always between 2 and 12.

range: /reɪndʒ/ **1.** *n.* the difference between the lowest and highest values.

ranj, veri aralığı

2. *n.* the set of all output values of a function. ***see also*** *domain and codomain.*

görüntü kümesi

* If the function is $f(x)=x^2$ and domain is {1,2,3}, range will be {1,4,9}.

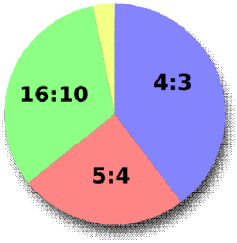
rate: /reɪt/ *n.* is a ratio that compares two quantities of different units. ***see also*** *ratio.*

oran (birimli)

* Kilometers per hour and cost per pound are examples of rate.

ratio: /reɪʃioʊ/ n. it shows the relative sizes of two or more values. ***see also*** *rate and proportion.*

oran



* Ratios can be shown in different ways: 1:3, 1/4, 0.25 or 25%.

rational number: /ræʃənəl-nʌmbər/ *n.* is a real number which is written as a ratio of integers with non-zero denominator. ***abbr*** *ℚ.* ***see also*** *irrational number.*

rasyonal (oranlı) sayı

* All the repeating or terminating decimal numbers are rational number.

ray: /reɪ/ *n.* a line with a start point but no end point, it goes infinity. ***see also*** *line.*

ışın

* The ray PQ is represent as $\overrightarrow{PQ}$

real axis: /rɪəl-æksɪs/ *n.* is a line corresponding to zero imaginary part on a complex plane**.** ***see also*** *imaginary axis.*

reel eksen

* Real axis is the x-axis on a complex plane.

real number: /rɪəl-nʌmbər/ *n.* set of real numbers include all the rational and irrational numbers. ***abbr*** *ℝ.*

reel (gerçel) sayılar
* -25 belongs to integers, rational numbers and real numbers.

real part: /rıəl-pɑːrt/ *n.* the part of complex number that doesn't have a imaginary number. ***see also*** *imaginary part.*
reel kısım
* In the complex number 2-I, the real part is 2.

reciprocal: /risıprəkəl/ *adj.* to get the reciprocal of a number, just divide 1 by the number. ***same meaning*** *multiplicative inverse.* ***see also*** *inverse.*
ters (çarpmaya gore)
* Every number has a reciprocal expect 0 because 1/0 is undefined.

rectangle: /rektæŋgəl/ *n.* a 4-sided flat shape with straight sides where all interiror angles are 90°. ***same meaning*** *quadrilateral.*
dikdörtgen
* Area of a rectangle equals length multiply by width.

recurring decimal: /rikɜːrɪŋ-desəməl/ ***see*** *repeating decimal*

reduce: /ridjuːs/ **1.** *v.* to lower the size of an object or value of a quantity.
küçültmek, azaltmak

2. *v.* reducing fractions means making it smaller. ***same meaning*** *simplify.* ***see also*** *enlarge and expand.*
sadeleştirmek
* The price of the ring is being reduced by $16.

reflection: /riflekʃən/ *n.* is a transformation in which the figure is the mirror image of the other. ***see also*** *flip, rotation and translation.*
yansıma
* The reflection of letter "p" is "q".

reflex angle: /riːfleks æŋ gəl/ *n.* it is an angle that is between 180° and 360°. ***see also*** *acute, obtuse, right, straight and full angles*.
yansık açı
* A full angle is also a reflex angle.

regular: /regjʊlər/ *adj.* a polygon which all angles and sides are equal or a polyhedron whose faces are identical regular polygons.
düzgün

* The measure of each angle of a regular polygon with n sides given as (n-2) x $\frac{180}{n}$.

relation: /rileıʃən/ *n.* a set of input and output values, usually represented in ordered pairs.
bağıntı
* Choose a mapping diagram of the relation {(1,2),(3,7),(5,4)}.

relative: /relətıv/ *adj.* compared to other similar things or amount.
oransal
*If your team has won 9 games from a total of 12 games played: the frequency of winnng is 9, the relative frequency of winning is 9/12.

relatively prime numbers: /relətıvli -praım-nʌmbərz/ *n.* two integers a and b; they don't have any common factor other than 1 or -1.
aralarında asal sayılar
* 12 and 13 are relatively prime numbers as there are no common factors between 12 and 13 other than 1.

remainder: /rimeındər/ *n.* is the amount left over after division when one divisor does not divide the dividend exactly. ***see also*** *dividend, divisor and quotient*
kalan
* Divide and write the answer with a remainder for 76÷9.

repeating decimal: /ripi:tıŋ-desəməl/ *n.* is decimal number that has digits that repeat forever. ***same meaning*** *recurring number.****see also*** *terminating decimal.*
tekrarlı ondalık sayı.
*The repeating decimal can be represented by putting a bar over the digit. For instance, 0.166666... can also be written $0.1\bar{6}$.

represent: /reprizent/ *v.* be a sign or symbol of something.
sembolize etmek
*Why does x represent an unknown?

result: /rizʌlt/ n. *n.* the final part of something. ***see also*** *conclusion.*
sonuç
*What is the result? 5000? You are wrong, if you don't believe me check in your calculator. It is 4100.

removing a common factor: /rimu:vıŋ-ə-kɑmən-fæktər/ it means taking away the greatest common factor between two or more polynomials.
ortak çarpan parantezine alma
* In the expression 2x+18, the common factor is 2 so we can remove a common factor. Expression can be written in factor from as 2(x+9).

revolution: /revəluːʃən/ *n.* one complete turn or a rotation of 360°.
devir (dönme)
* Which direction will you face if you start facing east and make ¾ of a revolution, clockwise?

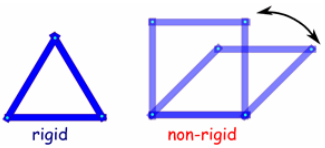
rhombus: /rɑmbəs/ *n.* is a parallelogram with four equal sides. ***same meaning*** *diamond*. ***see also*** *parallelogram.*
eşkenar dörtgen
* Diagonals of rhombus bisect each other at right angles.

right: /raɪt/ **1.** *n.* on or towards the side of your body that is to the east when you are facing north. ***see also*** *left.*
sağ
2. *adj.* it means size of 90 degrees.
dik, doksan derece
3. *adj.* correct or true.
doğru
*Numbeers on the left are smaller than numbers on the right.

right angle: /raɪt-æŋgəl/ *n.* is an angle that has a measure of 90°. ***see also*** *acute, obtuse, straight, reflex and full angles.*
dik açı
* One quarter of the circumference has right angle, it means π/2 radians.

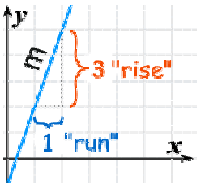
right angled triangle: /raɪt-æŋgəld-traɪæŋgəl/ ***see*** *right triangle*

right triangle: /raɪt-traɪæŋgəl/ *n.* a triangle with one of its measuring 90°.
dik üçgen
*A right triangle is always known with Pythagorean theorem.



rigid: /rɪdʒɪd/ *adj.* fixed, not moving.
sabit
* The above construction shows us differences about rigid and non-rigid. (2-dimensional)

rise: /raɪz/ *n.* is a vertical distance between two points on the graph. ***see also***



run.

grafikte dikey iki nokta arası uzaklık

* The ratio of rise to the run founds the slope of the line.

roman numerals: /roʊmən-nju:mərəlz/ *n.* is numeral system used by the ancient romans.

roma rakamları

* Following are the basic symbols and they represent in the roman numeral system.
I=1, V=5, X=100 and D=500.

root: /ru:t/ **1.** *n.* is a special cases of exponentiation, where the exponent is a fraction like this 1/n. roots are written using the radical sign.

kök (köklü sayı) **2.** *n.* the solution of an equation or it is a point where a function equals zero.

kök (denklem)

* For the function x^2-4, roots are 2 and -2.

rotation: /rəʊteɪʃən/ *n.* a circular movement, there is a central point that stays fixed and everything else moves around that point. ***see also*** *reflection and translation.*

dönme

* The fixed point around which a figure is rotated is called center of rotation.

round: /raʊnd/ *v.* a method of approximating a number, to go its nearest place value. ***see also*** *round up and round down.*

yuvarlamak

* If we are suppose to round the number 3567 to nearest hundred, the rounded number is 3600. For 52.6749 to the tents place, it means 52.7.

round angle: /raʊnd-æŋgəl/ ***see*** *full angle*

round down: /raʊnd-daʊn/ *v.* to reduce a number to the nearest digit. ***see also*** *round up and round.*

yuvarlamak (düşürerek)

* Can you round these numbers down?

round up: /raʊnd-ʌp/ *v.* to increase a number to the nearest digit. ***see also*** *round down and round.*

yuvarlamak (yükselterek)

* 86 can round up so, increase the 8 by 1 to 9, answer is 90.

row: /roʊ/ *n.* arrangement of objects or data in a horizontal line. ***see also*** *column.*

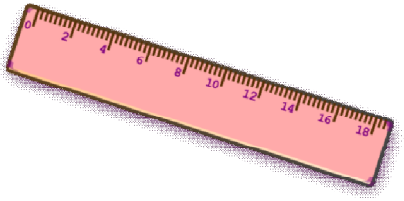
satır

* Numbers lying side-by-side in the number system. It is a row of numbers.

rule: /ru:l/ *n.* is the procedure that a count must follow.

kural

* 7, 16, 43,... is the pattern for which the rule is “multiply by 3 and subtract by 5 to get the next number”.



ruler: /ruːlər/ n. a tool used to straight lines and measure distances. ***same meaning*** *straitedge.*
cetvel
* Rulers is marked in cm or inch form.

run: /rʌn/ *n.* is the horizontal distance between the two points on the graph. ***see also*** *rise.*
grafikte yatay iki nokta arası uzaklık
* Identify run and rise the slope %60.

S

sample: /sæmpəl/ n. is a part of the population. ***see also*** *population.*
örneklem
* You could take a glass of water to find out what the quality of water in the whole lake was. The sample is a glass of water.

satisfy: /sætɪsfaɪ/ *v.* if the given value of a variable evaluates the equation or inequality to zero, then we say that the value satisfies the given equation or inequality.
doğrulamak (denklemi veya eşitsizliği)
*x+12-25=0, For this equation, only x=13 satisfies the equation as 13+12-25=0

scalar quantity: /skeɪl ər-kwɑːntəti/ *n.* is a quantity which has only magnitude but no direction. ***see also*** *vector quantity.*
skaler büyüklük
* An example of a scalar quantity is temperature.

scale: /skeɪl/ *n.* the ratio of the length in a model to the length of the real thing.
ölçek
* In the drawn horse, scale factor is 1:10; so a measurement of 190mm on the drawing would be 1.9 m on the real horse.

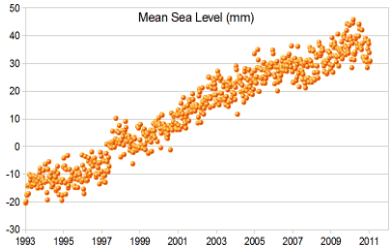
scalene triangle: /skeɪliːn-traɪæŋgəl/ *n.* a triangle in which all the three sides are different. ***see also*** *equilateral and isosceles triangle.*
çeşitkenar üçgen.
* All the angles of a scalene triangle are not equal.

scales: /skeɪəlz/ ***see*** *balance scales*

scatter plot: /skætər-plɑt/ *n.* is a graph made by plotting ordered pairs in a coordinate plane to show the correlation between two sets of data.

serpilme diyagramı

* A scatter plot shows no trend if the ordered pairs show no correlation.



scientific notation: /saɪəntɪfɪk nəʊteɪʃən/ *n.* is a method of writing numbers as the product of two factors where the first factor is greater than or equal to 1 but less than 10 and the second factor is a power of 10. ***see also*** *standart form.*

bilimsel gösterim

* The scientific notation of the number 5,300,000 is $5.3x10^6$.

secant: /si:kənt/ **1.** *n.* is a trigonometric function, the length of the hypotenuse divided by the length of adjacent side. ***abbr*** *sec.* ***see also*** *cosecant.*

sekant

2. *n.* is a straight line that intersects a curve at two or more points. ***see also*** *line segment.*

daireyi iki noktadan kesen doğru

* Secant is also equal to 1/cosine.

second: /sekənd/ **1.** *n.* being the ordinal number of two. *abbr* 2^{nd}.

ikinci

2. *n.* the basic unit of time, there are 60 seconds in 1 munite.

saniye

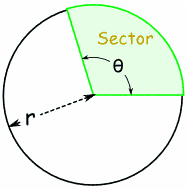
* One second is approximately the time of one heartbeat when you are resting.

second hand: /sekənd-hænd/ *n.* the hand that shows the number of seconds.

saniye kolu

* The second hand moves around the fastest on analog clock.

sector: /sektər/ *n.* the area between an arc and two radii of a circle.



daire dilimi

* The two radii divide the circle into two parts are called a major sector and a minor sector.

segment: /segmənt/ *n.* the area of a circle made by a chord and an arc.

daire kesmesi

* What is the formula of the circular segment when the angle is in degrees?

semicircle: /semi-sɜːrkəl/ *n.* half of a circle.

yarım daire

* A semicircle is formed by cutting a whole circle along a diameter line.

sentence: /sentənts/ *n.* it says something about mathematics.

matematiksel cümle, ifade

* "x+3=6" and "10 is an even number" are two examples of sentence in mathematics.

sequence: /siːkwənts/ n. a list of numbers in a special order. ***see also*** *series.*

dizi

* 3,5,7,9,... is a sequence starting at 3 and increasing by 2 each time.

series: /sɪriːz/ *n.* the sum of the terms of a sequence. ***see also*** *sequence.*

seri, seriler

* For any sequence of rational numbers, real numbers, complex numbers, functions etc. associated series is defined as the ordered formal sum.

set: /set/ *n.* a collection of things. ***same meaning*** *cluster.*

küme

* There should be only one of each member in a set, because all members are unique.

shape: /ʃeɪp/ *n.* the form of an object, how it is laid out in space.

şekil

* Sphere, cube, pyramid and prism are three dimensional shapes.

short division: /ʃɔːr-dɪvɪʒən/ n. is a calculated division in one line. ***see also*** *long division.*

kısa bölme işlemi

* "What is 195 divided by 15 in short division?" So, it is 195/15=13.

short word form: /ʃɔːrt- wɜːrd-fɔːrm/ *n.* is a way of writing numbers using letters or sometimes numbers and letters. ***see also*** *standart form, scientific notation and expanded notaton.*

standart form

* In short word form, 474,136 is written in words: four hundred seventy four thousand one hundred thirty six.

SI unit system: /es-aɪ-juːnɪt-sɪstəm/ *n.* the international system of units. the modern form of metric system. ***see also*** *UK imperial system and US customary system.*

uluslarası birim sistemi

* SI system is the world's most widely used system of measurement.

side: /saɪd/ *n.* one of the lines that make a flat shape or one of the surfaces that make a solid object. ***see also*** *edge and face.*

kenar, yüz

* Side is a line segment. It forms part of the perimeter of a plane geometric figure.

sigma notation: /sɪgmə-nəʊteɪʃən/ *n.* it represents the sum of a bunch terms. ***see also*** *summation and pi notation.*

toplam sembolü

* ∑ is a capital letter from the Greek alphabet called sigma.

sign: /saɪn/ *n.* symbol, used instead of words. ***same meaning*** *symbol.*

simge, sembol

* When used on its own, it means negative or positive: What sign the number? Is it negative?

similar: /sɪmələr/ *adj.* in geometry; if figures are similar, they have the same shape but not necessarily the same size. ***see also*** *congruent, same.*

benzer

* If one shape can become another using resizing, then the shapes are similar.

simple fraction: /sɪmpəl-frækʃən/ *n.* is a rational number written as a/b, where a and b are integers. ***same meaning*** *vulgar fraction and common fraction.*

bayağı kesir

*Simple fractions can be positive or negative, proper or improper.

simple interest: /sɪmpəl-ɪntrəst/ *n.* is the interest calculated only on the principal regardless of the interest earned so far.

basit faiz

* The formula for simple interest is: Interest = (principal) x (rate) x (time)

simplest form: /sɪmplɪst-fɔːrm/ *n.* in algebraic expressions or fractions, it is the easiest form to use.

en sade hal

* There are ways tohelp you simplify: factoring, combine like terms, clear out fractions by multiplying and recognizing a pattern you have seen before, like the difference of squares.

simplify: /sɪmplɪfaɪ/ *v.* to make a fraction, an expression or a root as simple as possible. ***same meaning***

reduce and cancel. ***see also*** *expand and enlarge.*

sadeleştirmek

*To simplify a fraction, divide the top and bottom by the highest number that can divide into both numbers exactly.

sine: /saɪn/ *n.* is a trigonometric function that is the length of opposite side divided by the length of the hypotenuse in the right triangle. ***abbr*** *sin.* ***see also*** *cosine.*

sinüs

* Good calculators have sin, cos and tan on them, to make it easy for you. Just put in the angle and press the button.

size: /saɪz/ *n.* how big something is.

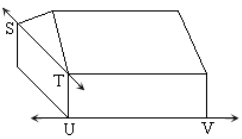
boyut (büyüklük)

* We can show planet's sizes in the solar system so Jupiter is the biggest of all.

skew: /skjuː/ **1.** *adj.* in the solid geometry; if two lines is skew, They are nonparallel and they don't intersect.

paralel olmayan ve kesişmeyen

2. *adj.* in the solid geometry; it is a polygon and it's vertices don't lie in a plane.



eğri

* $\overline{ST}$ and $\overline{UV}$ are skew lines in the figure shown.

skip counting: /skɪp kaʊntɪŋ/ *n.* counting forwards or backwards by a number other than 1.

ritmik sayma

* Skip counting by 3 is: 3, 6, 9, 12, 15 ...

slide: /slaɪd/ ***see*** *translation.*

slope: /sləʊp/ *n.* is the measure of steepness of a line. see also rise and run.

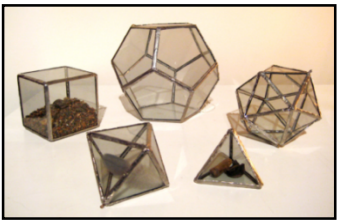
eğim

* We can calculate the slope of a curve: It is the slope of a line tangent to a particular point on the graph of the curve.

small: /smɔːl/ *adj.* little in size or amount. ***see also*** *big and large.*

küçük

* 45 is smaller than 54.



solid: /sɑːləd/ *n.* a three dimensional object that has width, depth and height.

katı cisim
* Examples include; spheres, cubes, pyramids and prisms.

solution: /səluːʃən/ *n.* a value you can put in place of a variable that would make the equation true.
çözüm
* Example: x-2=4, when we put 6 in place of x we get: 6-2=4 which is true, so x=6 is a solution.

solve: /sɑːlv/ v. to find the answer to something.
çözmek
*Students are still no nearer to solving the question.

sort: /sɔːrt/ *v.* to arrange or group in a special way.
sınıflandırmak
* We usually sort objects by size, type, alphabetically or color.

space: /speɪs/ *n.* the region in which objects exist.
uzay, boşluk
* Small objects take up less space than big objects.

speed: /spiːd/ *n.* how fast something is moving. it is a scalar quantity. ***see also*** *velocity.*
hız
* The maximum speed of my car is 225 kilometers per hour.

sphere: /sfɪər/ *n.* a three dimensional object shaped like a ball.
küre
* Every point on the surface of sphere is the same distance from the center.

spiral: /spaɪrəl/ *n.* a curve which turns atound some central point, getting closer and closer as it goes.
spiral

* Cutaway of a nautilus shell shows the chambers arranged in an approximately logarithmic spiral. It is an example of golden ratio.

spring balance (scale): /sprɪŋ-bælənts/ *n.* is measure weight or force by how far a spring moves.
yaylı terazi
* Spring balances are used for trucks.

square: /skweər/ **1.** *n.* a quadrilateral with all sides have equal length and every angle is a right angle. ***see also*** *rectangle.*
kare
* The perimeter of a square whose four sides have length "/ "is P=4/
2. n. a unit used to measure area. ***see also*** *cubic.*
kare (m^2, cm^2)
* An area of soccer field is between 6400 square meters and 8250 square meters.

square number: /skweər nʌmbər/ *n.* the result of using a whole number in a multiplication two times. ***see also*** *triangular number and cube number*.
karesel sayı
* 7x7= 49, 49 is a square number.

square root: /skweər-ru:t/ n. each positive number has another number that, when multiplied times itself, equals that number. denoted by $\sqrt[2]{\ }$ ***see also*** *cube root.*
kare kök
* 4 and -4 are square roots of 16 because $4^2=(-4)^2=16$.

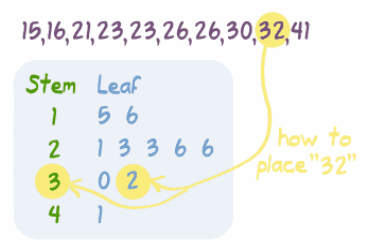
squared: /skweərd/ *n.* a number that is multiplied by itself, to the 2^{nd} power. ***see also*** *cubed*.
karesi (bir sayının)
* 4 squared equals 16, like this: $4^2=16$.

standart deviation: /stændərd-di:vieɪʃən/ n. is a measure of how spread out numbers are. it is the square root of variance. denoted by σ. ***see also*** *variance.*
standart sapma
* Standart deviation is the average distance of any given number in a set from the mean of seat.

standard form: /stændərd-fɔ:rm/ *n*. is a way of writing numbers using digits. ***see also*** *short word form, scientific notation and expanded notaton.*
standart form
* 16,000, 100,113, 1,228 and 0.0786 are in standart form.

statistics: /stətɪstɪks/ *n.* is a branch of applied mathematics, the study of data.
istatistik
* There are basicly three kinds of averages commonly used in statistics: mean, median and mode.

stem and leaf plot: /stem-ænd-li:f-plɑt/ *n*. is a method of



organizing numerical data in order of place value. data valueis split into a leaf (last digit) and a steam (other digit).

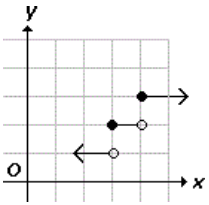
dal yaprak gösterimi

* In the stem and leaf plot, stem values are listed down and the leaf values are listed next to them.

step: /step/ *n.* one of the things that you do to achieve something.

adım

*Problem solving plan in 4 steps:
- Read the problem carefully.
- Underline clue words and numbers.
- Ask yourself if you've seen a problem similar to this one.
- What did you need to do?



step function: /step-fʌŋkʃən/ *n.* is a function whose graph is a series of line segments.

basamak fonksiyonu

* The figure shows the graph of the step function.

straight: /streɪt/ *adj.* something has no curves. see also curve.

düz, doğru

* In geometry, a line is always straight.

straightedge: /streɪtedʒ/ *see* ***ruler***

straight angle: /streɪt-æŋgəl/ *n.* it measures 180°, half a revolution. see also acute, right, obtuse, reflex and full angles.

doğru açı

* A straight angle changes the direction to point the opposite way.

subset: /sʌbset/ *n.* A and B are sets and if A is contained inside B, set A is a subset of set B. ***see also*** *superset.*

altküme

*Empty set has just 1 subset which is itself.

substitution method: /sʌbstɪtju:ʃən-meθəd/ *n.* is a method of solving a system of equations, putting numbers where the letters are.

yerine koyma yöntemi

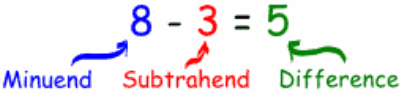
* What is x+10/x?
If you put 5 where x is: 5+10/5=7 (it is the substitution method)

subtract: /səbtrækt/ *v.* to take one number away from another. ***see also*** *add.*

çıkarmak

* If you have 5 apples and you subtract 2, you will be left with 3.

subtraction: /səbtrækʃən/ *n.* is a mathematical operation that tells us the differerence between two numbers or quantity.



çıkarma işlemi

* The following are simple subtraction problems:
9815-9815=0
22-24=-2
5.3-1.1=4.2

subtrahend: /sʌbtrəhend/ *n.* the second number in a subtraction. ***see also*** *minuend and difference*.

çıkan

* In the example "8-3=5", 3 is the subtrahend.

successive: /səksesɪv/ adj. one after the other. ***same meaning*** *consecutive.*

ardışık

* Friday, Saturday and Sunday are successive days.

successor: /səksesər/ *n.* something that comes after another thing. ***see also*** *predecessor.*

ardıl

*The successor of 0 is 1, successor of 1 is 2 and so on.

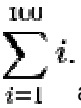
sum: /sʌm/ n. the result of adding two or more numbers. ***see also*** *addend and total.*

toplam

* 9 is the sum of -4, 7, 1 and 6.

summation: /sʌmeɪʃən/ *n.* is the operating of adding a sequence of numbers. the result is their sum or total. denoted by Σ. ***see also*** *sigma notation and product.*

toplam (dizi)



* The value of this summation is 5050. It can be found without performing 99 additions, by using a formula.

superset: /su:pərset/ *n.* A and B are sets and if A is contained inside B, set B is a superset of set A. ***see also*** *subset.*

kapsayan küme, üstküme

*Every set is superset of the empty set.

supplementary angles: /sʌplɪməntəri-æŋgəl/ *n.* two angles that add up to give 180°. see also complementary angles.

bütünleyen açılar

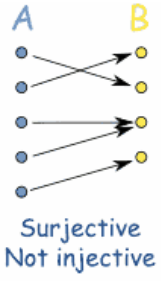
* 125° and 55° add up to give 180°, so they are called supplementary angles.

surd: /sɜ:rd/ *n.* a number that can't be simplified to remove a root (especially square root).
köklü irrasyonel sayı
* $\sqrt{2}$ is a surd because it can't be simplified further but $\sqrt{4}$ is not a surd.

surface: /sɜ:rfıs/ *n.* the outside layer of an object.
yanal kısım
* Sphere is a 3-dimensional shape and it has a surface that looks smooth.

surface area: /sɜ:rfıs eəriə/ *n.* the sum of the areas of all faces of 3-dimensional shape.
yanal alan
* The formula for the total surface area of a cone is $\pi r^2+\pi rl$ (r=radius of the base, l=radius of the sector)

surjective: /sɜ:rdʒektıv/ *adj.* if each element of range has at least one matching with elements of domain.
örten
* Surjective means that every "B" has at least one matching "A".



survey: /sɜ:rveı/ *n.* is a method of collecting data or information about a population using questions.
anket, araştırma
* The following are examples of some ssurvey questions:
- What is your favorite game?
- How many hours do you study daily?

symbol: /sımbəl/ n. a pattern or image used instead of words.
sembol, simge
* "+" is the symbol for "plus".

symmetry: /sımətri/ n. is an exact matching of form and arrangement of parts on opposite sides of a boundary (line, plane, axis...). ***see also*** *asymmetry.*
simetri
* The simplest type of symmetry is "reflection or mirror" symmetry.

system: /sıstəm/ *n.* a set of principal, rules, an arrangemenet of things.
sistem
* A dynamical system is a concept in mathematics where a fixed rule describes a geometrical shape.

system of equations: /sıstəm-ɑv-ikweıʒənz/ *n.* is a set of two or more equations with the same variables.
denklem sistemi

* There arevarious methods such as substtution, elimination, graph-and-check methods etc. by which a system of linear equations can be solved.

system of inequalities: /sɪstəm-ɑv-ɪnɪkwɒlətiz/ *n.* is a set of two or more inequalities with the same variables.
eşitsizlik sistemi
* Which of the graphs defines the system of inequalities?
x+y<3
x+2y≤10
y≥-3

T

table: /teɪbəl/ *n.* numbers or quantities arranged in rows and columns.
tablo
* This is a table of what sport people play at a school.

"What sport do you play?"

Sport	People
Soccer	106
Tennis	45
Gymnastics	54
Swimming	82
Track	68

tables: /teɪbəlz/ *n.* a short name for the multiplication tables. ***same meaning*** *multiplication tables*.
çarpım tablosu
* He learnt his tables up to 8 times 8.

take away: /teɪk-əweɪ/ *v.* to subtract a number or thing.
çıkarmak
* If you take 4 away from 12, you get 8.

tally: /tæli/ *v.* to record, to make a count by stick or something.
çentik atmak
*Tallying was an ancient memory aid device used record and document numbers, quantities, or even messages.

tangent: /tændʒənt/ **1.** *n.* in a right angled triangle, the tangent of an angle is; the length of the opposite side divided by the length of the adjacent side. ***abbr*** *tan.* ***see also*** *cotangent.*
tanjant
2. *n.* a line that just touches a curve at one point, without cutting across it. ***see also*** *chord.*
teğet
* No tangent can be drawn from a point inside a circle to it.

tangram: /tængræm/ n. a traditional Chinese puzzle made of a square divided into seven pieces. that can be arranged to match particular designs.
tangram
* A tangram contains

one parallelogram, one square and five triangles.

temperature: /tempərətʃər/ n. how hot or cold a thing is.
sıcaklık
* Temparature is measured using a thermometer, usually in the Celsius and Fahrenheit scale.

ten: /ten/ n. is an even natural number following 9 and preceding 11.
on
* Ten is the base of the decimal numeral system.

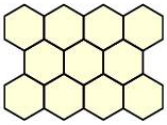
tens: /tens/ n. in the second right digit of any whole number.. ***see also*** *ones and hundreds.*
onlar (basamak)
* 1,784; 8 shows us tens' place.

tenth: /tentθ/ n. one part of ten equal parts. ***see also*** *hundredth, thousandth.*
onda bir
* The fractional form of one tenth is 1/10 and the decimal equivalent is 0.1.

term: /tɜːrm/ *n.* is an algebraic value; variable, number or constant.
terim
* In 6+2x-2y; 6, 2x and 2y are all terms.

terminating decimal: /tɜːrmıneıtıŋ-desəməl/ *n.* is decimal number that has digits that don't go on forever. ***see also*** *repeating decimal.* **sonlu ondalık sayı**
* 0.25 and 3.0325 are examples of terminating decimal numbers.

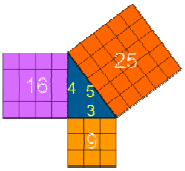
tesselation: /tesəleıʃən/ n. is a repeating pattern of figures that covers a plane without any gaps or overlaps.
mozaik döşeme
* This tessellation is made with hexagons.



tetragon: /tetrəgɑːn/ n. ***see*** *quadrilateral*

tetrahedron: /tetrəhiːdrən/ *n.* a polyhedron with 4 triangular faces.
dört yüzlü
* A tetrahedron has six edges and four vertices.

theorem: /θıərəm/ *n.* a statement that has to be proved. ***see also*** *axiom and postulate*.
teorem
* The "Pythagoras Theorem" proved that for a right angled



triangle $a^2+b^2=c^2$.

thermometer: /θəmɒmɪtər/ *n.* an instrument used to measure temperature, usually in the Celsius and Fahrenheit scale.
termometre
* Today, my thermometer showed that the temperature was about 28 degress Celcius.

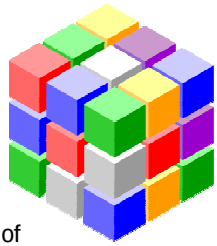
third: /θɜːrd/ **1.** *n.* the ordinal number matching the number three.
üçüncü
2. *n.* one of three equal parts.
üçde bir
*Third number in the set of whole numbers is 2.

thousand: /θaʊzənd/ *n.* the number 1000.
bin
* 10 times 10 times 10 equal one thousand.

thousandth: /θaʊzənθ/ *n.* one part of 1000 equal parts of a whole.
see also *tenth, hundredth.*
binde bir.
* 56.781; 1 is the thousandths place and is read as fifty six and seven hundred eighty one thousandths.

three: /θriː/ *n.* is a number following 2 and preceding 4.
üç
* 3 is the first odd prime number.

three-dimensional: /θriː-daɪmentʃənəl/ n.an object that has height, width and depth, like any object in the real world.
see also *two dimensional.*



üç boyutlu
* Pyramid is a kind of three-dimensional shapes with its polygonal base.

thrice: /θraɪs/ *adv.* three times.
see also *once and twice.*
üç kere
* 12 is thrice 4.

time: /taɪm/ *n.* is the ongoing sequence of events taking place. the past, present and future.
zaman
* We measure time using seconds, minutes and hours. Also we can use days, weeks, years etc.

times: /taɪmz/ *prep.* product of the previous number and the following number.
kere (çarpı)
* Four times thirty is a hundred and fifty.

times tables: /taɪmz-teɪbəlz/ *n.* ***see*** *tables or multiplication tables*

ton: /tʌn/ *n.* a unit of metric mass equal to 1000 kilograms. ***abbr*** *t.* ***same meaning*** *tonne.*

ton

* Our car has a mass of about 1.5 tons.

tonne: /tʌn/ *n.* ***see*** *ton*

top: /tɑːp/*adj.* the highest part of something. see also bottom.

üst

* What is the number called pn the top of a fraction?

torus: /tɔːrəs/ *n.* a 3d shape made by revolving a circle about an axis that is in the same plane as the circle. ***see also*** *annulus.*

halka (üç boyutlu)

* Torus is a topological space which is a product of two circles.

total: /təʊtəl/ *n.* the result of adding. see also sum and addend.

toplam

* Adding 3 balls and 2 balls gives a total of 5 balls.

transformation: /træntsfəmeɪʃən/ *n.* moving a shape so that it is in a different position, but still has same size, area, angles and line lengths. ***see also*** *rotation, reflection, translation and dilation.*

dönüşüm

* Turn, flip or slide are the basic moves for transformation.

translation: /trænsleɪʃən/ *n.* moving a shape, without rotating or flipping it, just sliding.

kaydırma, taşıma

* After translation, the shape still looks exactly the same, just in a different place.

transversal: /trænzvɜːrsəl/ *adj.* a line that crosses at least two other lines.

çapraz kesen (doğru)

* In this figure, transversal is crossing two lines.

trapezium: /trəpiːziəm/ n. a 4-sided flat shape with straight sides and no parallel sides. ***see also*** *trapezoid.*

yamuk (paraleli olmayan)

* Trapezium is not a common word. In American English, we can use trapezium to define this shape.

trapezoid: /træpɪzɔɪd/ *n.* a 4-sided flat shape with straight sides that has a pair of opposite sides parallel. ***see***

also *trapezium.*

yamuk (yamuk ya da paraleli olan yamuk)

* The sides of trapezoid that are parallel are called “bases”. The other sides are “legs” whisch may or may not be parallel.

treble: /trebəl/ ***see*** *triple*

tri-: /traı- *or* tri-/ *pref.* it means three.

üç (ön ek)

* A triangle has three angles; a tricycle also has three wheels.

triangle: /traıæŋgəl/ *n.* a 3-sided polygon.

üçgen

* There are 6 kinds of triangles; equilateral, isosceles, scalene, right, acute and obtuse triangles.

triangle proportionality theorem: /traıæŋgəl-prəpɔ:ʃənæləti- θıərəm/ *n.* it states that a line drawn parallel to any of the sides of a triangle divides the other two sides proportionally.

üçgende temel benzerlik teoremi

* In the given triangle ABC:

$$\frac{|AD|}{|AB|} = \frac{|AE|}{|AC|} = \frac{|DE|}{|BC|}$$

This is called triangle proportionality theorem.

triangular number: /traıæŋgjʊlər-nʌmbər/ *n.* a number that can make a triangular dot pattern. ***see also*** *square number and cube number.*

üçgensel sayı

* 1, 3,6,10 and 15 are the examples of triangular numbers.

trigonometry: /trıgənɑ:mətri/ *n.* is the study of the relationship between angles and sides of triangles.

trigonometri

* The name of trigonometry comes from Greek trigonon (triangle) and metron (measure).

trillion: /trıljən/ *n.* a one followed by 12 zeros.

trilyon

* A trillion is shown as $1x10^{12}$ in the scientific form.

trinomial: /traınəʊmiəl/ *n.* a polynomial with three term. ***see also*** *monomial, binomial and polynomial.*

üç terimli polinom

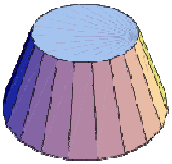
* $3x^2+3y-2$ is an example of trinomial.

triple: /trıpəl/ *adj.* to make something three times. ***see also*** *double.*

üçleme, üç kez

* Triple 6 is 18.

truncated: /trʌŋkeɪtɪd/ *adj* .is created by slicing the top of a cone or a pyramid. ***same meaning*** *frustum.*



kesik

* This shape is an example of a truncated cone.

turn: /tɜːrn/ *v.* to rotate about point.

döndürmek

* One turn is a full rotation (360°).

twice: /twaɪs/ *adv.* two times as many. *see also once and thrice.*

iki kere

* 8 is twice 4.

two: /tuː/ *n.* a numerical value equal to 2.

iki

* Two is the second number in the set of natural numbers.

two-dimansional: /tuː-daɪmentʃənəl/ n.an object that only has two dimensions, such as width and height. ***see also*** *three dimensional.*

iki boyutlu

* Squares, circles, triangles are two dimensional objects, they don't have thickness.

U

undefined: /ʌndifaɪnd/ *n.* an expression in mathematics which doesn't have meaning and it isn't assigned an interpration.

tanımsız

* Division by zero is undefined in the field of real numbers.

UK imperial system: /juː-keɪ-ɪmpɪəriəl-sɪstɪm/ *n.* is one of the measurement systems introduced by the British. ***see also*** *SI unit system and US customary system.*

İngiliz ölçü sistemi

*Some of the most common units of the imperial System are inch, foot, yard, mile, grain, ounce, pound, ton, acre, gallon...

unequal: /ʌniːkwəl/ *adj.* not equal. denoted by ≠.

eşit olmayan

* 7 and 5 are unequal numbers.

union: /juːniən/ n. combining all the elements of two or more than two sets. ***see also*** *intersection.* ***same meaning*** *cup*. ***denoted by*** *∪.*

birleşim işlemi

*In the union of sets, element is written only once even if they exist in both the sets.

unit: /juːnɪt/ *n.* a quantity used as a standard of measurement.

birim (ölçüm)

* Units of time are second, minute, hour, day, week, month, year...

unit fraction: /juːnɪt-frækʃən/ *n.* a fraction where the numerator is 1.

birim kesir

* 1/2, 1/5, 1/100 are examples of unit fraction.

unit vector: /juːnɪt-vektər/ n. is a vector whose length is 1. ***denoted by*** *â (unit vector of a).*

birim vektör

* The magnitude of a uit vector is 1.

units: /juːnɪts/ *see* ***ones***

universal set: /juːnɪvɜːsəl-set/ n. is a set which contains all subjects and itself.

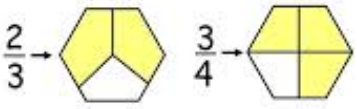
evrensel küme

* In our case the universal set is our ten best friend.

unknown: /ʌnnoʊn/ adj. is the variable to b solved. ***same meaning*** *variable.*

bilinmeyen

* lnx+7=19, x is the unkown.



unlike fractions: /ʌnlaɪk-frækʃənz/ *n.* fractions with the different denominators. ***see also*** *like fractions.*

paydaları eşit olmayan kesirler

* 3/5 and 23/7 are unlike fractions, as they have the different denominators.

US customary system: /juː-es-kʌstəməri -sɪstɪm/ *n.* is a system of measurements and developed from English units. ***see also*** *SI unit system and UK imperial system.*

Amerikan birim sistemi

* Several differences exist between UK system and US system.

unlikely: /ʌnlaɪkli/ adj. the event that may not happen. ***see also*** *likely amd equally likely.*

düşük olasılıklı

* "You will win a trip to New Zealand" is an unlikely event.

V

value: /vælju:/ *n.* a numerical quantity assigned to a variable.
değer
* Let us find the value of y of the equation y=2x-3, where x=4.

variable: /veəriəbəl/ *n.* a symbol or letter that represent unknown numbers or values. ***same meaning*** *unknown*.
bilinmeyen
* a^2+b^2, the variables here a and b.

variance: /veriənts/ *n.* is the statistical measure that tells us how spread out numbers are. ***see also*** *standart daviation*.
varyans
* Variance is the square of the standart deviation.

vector: /vektər/ *n.* a quantity that has both magnitude and direction. **vektör**
* A vector is always shown by an arrow when it is represented by a line segment.

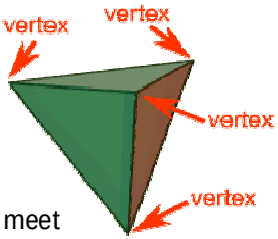
vector quantity: /vektər-kwɑ:ntəti/ *n.* is a quantity which has magnitude and direction. ***see also*** *scalar quantity*.
vektörel büyüklük
* Weight and acceleration are examples of vector quantity.

velocity: /vəlɒsəti/ *n.* is speed with a direction. ***see also*** *speed.*
sürat (vektörel hız)
* Velocity is vector but speed is a scalar quantity.

venn diagram: /ven-daıəgræm/ *n.* is a diagram that uses circles to illustrate the relationships among sets.
ven şeması
* Venn diagrams were conceived around 1880 by John Venn.

verify: /verıfaı/ *v.* to prove that something is true, or do something to discover if it is true.
doğrulamak
* To verify your answers in math problem, it is best to work backwards.

vertex: /vɜ:rteks/ n. a point where either two or more straight lines meet in a polygon. also it means; a point



where two or more edges meet in a 3-dimensional shape. ***same meaning*** *corner.* ***see also*** *vertices.*

köşe

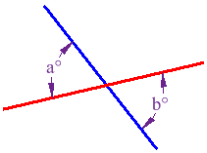
* How many vertices does a cube have?

vertical: /vɜːrtɪkəl/ *adj.* in an up-down position. ***see also*** *horizontal.*

dikey

* The y-axis in a coordinate plane is a vertical line.

vertical angles: /vɜːrtɪkəl-æŋgəlz/ *n.* are the angles opposite each other when two line cross.



ters açılar

* In this examples, a° and b° are vertical angles, and they are equal.

vertices: /vɜːrtɪsiːz/ *plural form of* ***vertex.***

vertically opposite angles: /vɜːrtɪkəli-ɑːpəzɪt-æŋgəlz/ *see* ***vertical angles***

vinculum: /vɪŋkjʊləm/ *n.* is the horizontal line used to separate the numerator and denominator in a fraction.

kesir çizgisi

* Vinculum is a latin word that means "bond" or "tie".

volume: /vɑːljuːm/ *n.* the amount of 3-dimensional space an object occupies. *see also capacity.*

hacim

* Cubic meters (m^3), liters and gallons are examples of units of volume.

vulgar fraction: /vʌlgər-frækʃən/ *see* ***simple fraction***

W

week: /wiːk/ *n.* a time period of 7 days. ***see also*** *day, month and year.*

hafta

* Sunday, Monday, Tuesday Wednesday, Thursday, Friday and Saturday together make a week.

weight: /weɪt/ n. the downward force caused by gravity on an object. ***see also*** *mass.*

ağırlık

* Weight and mass are different things, weight often uses the units of mass, such as grams, kilograms or ounce.

whole: /hoʊl/ adj. entire, all of something. ***see also*** *part.*
bütün, tüm
*A whole is shown 1/1.

whole number: /hoʊl-nʌmbər/ *n.* any positive integer or 0. ***see also*** *natural, integers, rational, irrational numbers.*
doğal sayılar
*In the set of whole numbers, there is no fractional part or negatives.

width: /wɪdθ/ *n*. the distance from side to side. ***see also*** *height and depth*
genişlik
*The width of this door is 80 cm.

X

x-axis: /eks-æksɪs/ *n.*the line on a graph that runs horizontally through zero. ***see also*** *y-axis.*
x ekseni
* Which of the following graphs has a point P on the x-axis?

x-coordinate: /eks-koʊɔ:rdɪnɪt/ *see* ***abscissa***

Y

y-axis: /waɪ-æksɪs/ *n.*the line on a graph that runs vertically through zero. ***see also*** *x-axis.*
y ekseni
* The coordinate plane formed by the intersection of the x and y-axes.

y-coordinate: /waɪ-koʊɔ:rdɪnɪt/ *see* ***ordinate***

year: /jɪər/ *n.* a period of time in which the Earth makes a complete revolution around the sun. ***see also*** *day, week and month*.
yıl
*The first day of the year is 1st January.

Z

zero: /zɪroʊ/ *n.*is a whole number between -1 and 1, with the symbol 0. **see also** *null, cipher, cypher and nought*.
sıfır
* The difference between same numbers is always zero.

DICTIONARY OF
MATHEMATICS

CHAPTER II
TURKISH – ENGLISH

A

abaküs (sayı boncuğu): abacus
acre: acre (4047 m²)
açı: angle
açıortay: bisector
açıölçer (iletki): protractor
ağırlık (kilo): weight *(bkz: kütle)*
akrep: hour hand *(analog saatte)*
aksiyom (belit): axiom
alan: area
algoritma: algorithm
alt: bottom
alt küme: subset
altı: six
altıgen: hexagon
altın oran: golden ratio, golden mean (bkz: fi sayısı)
altıncı: sixth
Amerikan (geleneksel) birim sistemi: US customary system
analitik: analytic
analitik bölgeler: quadrant 1, quadrant 2,...
apsis: abscissa
ar: are (100 m²)
aralarında asal: co-prime
aralık: interval
arakesit: intersection *(bkz: kesişim)*
ardıl (sonraki): successor
ardışık: consecutive, successive
argüment: argument
aritmetik: arithmetic
aritmetik dizi: arithmetic sequence
artan: ascending, increasing
artı: positive *(sayı),* plus *(işlem)*
asal: prime
asal eksen: principal/transverse axis
asal olmayan (birleşik): composite
asimetri: asymmetry
asimptot: asymptote
ayak *(uzunluk birimi)*: feet (12 inç)
ayraç (parantez): bracket, paranthessis (bkz: süslü parantez, köşeli parantez)
ayrık: disjoint
ayrıt: edge
azalan: decreasing, descending

B

bağımlı: dependent
bağımsız: independent
bağıntı: relation
basamak: digit

basit kesir: proper fraction
baş: leading *(katsayı, terim...)*
belit (aksiyom): axiom
belirsiz: indefinite
benzer: similar (bkz: eş)
benzerlik: similarity
beş: five
beşgen: pentagon
beşinci: fifth
beşinci dereceden: quintic
bileşik (birleşik): improper *(kesir)*, composite *(sayı,asal olmayan)*, compound *(faiz)*
bilimsel gösterim (standart form): scientific notation, standard form
bilinen: known
bilinmeyen: unknown
bin: thousand
binde bir: thousandths
binom: binomial
bir: one
bir değerli (tek değerli): unique
bir değişkenli: univariate *(veri) (bkz: iki değişkenli)*
bir terimli polinom: monomial *(bkz: iki terimli polinom, üç terimli polinom)*
bire bir: injective, one-to-one
bire bir – örten: bijective, one-to-one correspondence
birim: unit, identity *(eleman)*
birimsel: unitary
birinci: first
birinci dereceden: linear
birleşim: union
birleşme özelliği: associative
bitişik: adjacent (bkz: komşu)
boş: empty, null, void
boşluk: gap
boy (yükseklik): height
boylam: longitude, longtitudional curve
boyut: dimension, size *(büyüklük, beden)*
bölen: divisor
bölme işlemi: division
bölü: divided by
bölüm: quotient
bölünebilme: divisibility
bölünen: dividend
brüt ağırlık: gross weight
bulmaca: puzzle
bütün: whole
bütünleyen: supplementary
büyük: great, big
büyüklük: size *(boyut)*
büyük harf: capital

C

cebir: algebra
cebirsel sayı: algebratic number

cebirsel olmayan sayı: transcendental number
cetvel: ruler, straightedge
cosecant (kosekant): cosecant
cosinüs (kosinüs): cosine

Ç

çan eğrisi: bell curve
çap: diameter
çapraz: cross
çapraz çarpım: cross multiply
çarpan: factor, multiplier
çarpanlara ayırma: factorisation
çarpı: times
çarpılan: multiplicand
çarpım: product
çarpım tablosu: multiplication/times tables, tables
çarpma işlemi: multiplication
çarpmaya göre tersi: reciprocal
çelişki: contradiction
çember: circle
çentikli doğru: jagged line *(grafikte)*
çeşitkenar: scalene
çevre: perimeter, circumference *(çemberin çevresi)*
çevrel çember: circumcircle, circumscribed circle (bkz: iç teğet çember)
çeyrek: quarter
çeyrek daire: quadrant
çıkan: subtrahend
çıkarma işlemi: subtraction
çıkarma işlemi: subtraction
çıkarmak: subtract *(ayrıca bkz:eksi)*
çıkartılan (eksilen): minuend
çıktı: output
çift: even *(sayı)*
çizgi (doğru) grafiği: line graph
çizmek *(grafik)*: plot
çokgen: polygon
çok yüzlü: polyhedron
çözmek: solve
çözüm: solution
çözümleme: decomposing
çubuk (sütun) grafiği: bar graph

D

dağılım: distribution
dağılma özelliği: distrubutive
dahil: include, inclusive
daire: circle, disc
daire dilimi: sector
dakika: minute

dal yaprak grafiği: stem and leaf plot
dar: narrow, acute *(açı)*
deka *(metre...)*: deca...
dekar: donum, dunam *(yaklaşık 920 m²)*
deltoid: kite
deney: experiment, test
deniz mili: nautical mile (1852 metre)
denk: equivalent, congruent
denklem: equation
değer: value
değer kümesi: codomain
değil: not *(mantıksal işlem)*, negation *(mantıksal isim)*
değişken: variable
değişme özelliği: commutative
derece: degree
derinlik: depth
desen: figure, pattern *(bkz: örüntü)*
desi *(metre...)*: deci...
determinant: determinant
devirli ondalık: recurring decimal
devrik (transpoz): transpose
dış: exterior, external
dışbükey: convex
dışında: except
dik: right
dik (kartezyen) kordinat sistemi: rectangular/cartesian coordinate system
dik kesişen: perpendicular
dik yamuk: trapezium
dikdörtgen: rectangle, oblong *(nadiren)*
dikdörtgenler prizması: retangular prism, cuboid *(küp gibi)*
dikey/düşey: vertical
dikey eksen (y ekseni): y-axis, vertical axis
diskriminant: discriminant
dizey (matris): matrix
dizi: sequence
dokuz: nine
dokuzgen: nonagon, enneagon
doğal sayı: whole number *(0 dahil)*, natural number *(0 dahil değil)*
doğru: line
doğru açı: straight angle
doğru (çizgi) grafiği: line graph
doğru orantı: direct proportion
doğrulamak: verify
doğruluk: truth *(mantık)*
doğrusal: linear
döndürmek: turn, rotate
dönme: rotation
dönüm: dunam, donum (1000 m²)

dönüşüm: transformation (bkz: dönme, yansıma, öteleme)
dönüştürme: conversion
dördüncü: fourth
dördüncü dereceden: quartic
dört: four
dört yüzlü (*katı cisim)*: tetrahedron
dörtgen: quadrilateral, tetragon, quadrangle, four-sided
düz: flat
düzgün: regular
düzine: dozen
düzlem: plane

E

e sayısı: e, euler's number (2,71)
ebas: reatest lower bound
ebob: greatest(highest) common divisor(factor) (gcd-gcf-hcf)
eğik: oblique, slanted
eğim: slope, gradient
eğim açısı: inclination
eğri: curve
eğri yüzey: curved surface
eğrilik: curveture
ekok: least(lowest) common factor(multiple) (lcf-lcm)
eksen: axis
eksi: negative *(sayı),* minus, take away *(işlem)*
eksilen (çıkartılan): minuend
eküs: least upper bound
eleman: element, member
eleman sayısı: order
elips: ellipse
en (genişlik): width, breadth
enlem: latitude, transversal curve
eş: same, congruent
eş (ortak) düzlemli: coplanar
eş (ortak) eksenli: coaxial
eş (ortak) merkezli: concentric
eşit: equal
eşçarpan: cofactor
eşitsizlik: inequality
eşkenar: equalateral, equiangular
eşkenar dörtgen: rhombus
eşlenik: conjugate
evren: population (istatistik)
evrensel küme: universal set

F

fahrenayt: fahrenheit

faiz: interest
faktöriyel: factorial
fark: difference
fi sayısı: phi (1,618...)
fiyat (ücret): price
fonksiyon: function
formül: formula
fraktal: fractal
frekans: frequency

G

galon: gallon (4,5 litre)
geçerli: valid
geçersiz: invalid
geçişme özelliği: transitive property
genel: general
geniş: wide, large, obtuse *(açı)*
genişletmek: expand
genişlik (en): width, breadth
geometri: geometry
geometrik dizi: geometric sequence
geometrik yer: locus
gerçel: reel, real
girdi: input
görüntü kümesi: range
gösterim (notasyon): notation
grafik: graphic
gram: gram
grup: group
gün: day

H

hacim: volume
hafta: week
halka: annulus *(iki boyutlu),* ring *(üç boyutlu)*
hareket: motion
harmonik: harmonique
hata: error
hektar: hectare (10.000 m²)
hekto *(metre...)*: hecto...
helis: helix
her: for all, for every, for any
herbir: each
hesap: calculation, computation, account, arithmetic and calculus *(özel olarak)*
hesap makinesi: calculator
hesaplamak: calculate, compute, count
heterojen: heterogeneous
hız: velocity (vektörel) *(bkz: sürat)*
hiperbol: hyperbola
hipotenüs: hypotenuse

hipotez (varsayım): hypothesis
histogram: histogram
homojen: homogeneous

I

ıraksak: non-convergent, divergent
ısı: heat (bkz: sıcaklık)
ışın: ray

İ

iç: interior, internal
iç teğet çember: incircle (bkz: çevrel çember)
iç teğet çemberin yarıçapı: apothem
içbükey: concave
ifade: expression
iki: two
iki değişkenli: bivariate *(veri) (bkz: bir değişkenli)*
iki kere: twice, double
iki terimli polinom: binominal *(bkz: bir terimli polinom, üç terimli polinom)*
ikili işlem: binary operation
ikinci: second
ikinci dereceden: quadratic
ikiye bölmek: bisect *(bkz: açıortay)*
ikizkenar: isosceles
iletki (açıölçer): protractor
imkansız: impossible
ince: thin
incelik: thinness
inç: inch (2,54 cm)
indirim: discount
indis: subscript
İngiliz (imparatorluk) ölçü sistemi: UK imperial system
integral: integral
ipucu: clue, hint
irrasyonel: irrational
irrasyonel köklü sayı: surd
iskonto (indirim): discount
ispat: proof
işaret: sign, symbol
işaret fonksiyonu: signum function
işlem: operation
işlem sırası (önceliği): order of operations
ivme: accelaration
izdüşüm: projection

K

kalan: remainder
kalın: thick
kalınlık: thickness
kalkülüs: calculus *(bkz: hesap)*
kapalı: close
kapalılık: closure
kapsayan küme: superset *(bkz: alt küme)*
kâr: profit
kara mili: statute mile (1609 m)
kare: square
karış: handspan
karmaşık: complex
karmaşık düzlem: complex plane
karşı: opposite
karşılaştırma: comparison, compare *(fiil)*
karşıt: converse
karşıt ters: contrapositive
kartezyen: cartesian
kartezyen (dik) kordinat sistemi: cartesian/rectangular coordinate system
kaşlı ayraç (süslü parantez): braces, curly brackets, set brackets
kat: multiple
katı cisim: solid
katrilyon: quadrillion (...milyar, trilyon, katrilyon, kentilyon...)
katsayı: coefficent
kelvin: kelvin
kesik: truncated, frustum *(koni ya da piramit için)*
kesim noktası: cut point
kesin olay: certain event
kesir: fraction
kesir çizgisi: vinculum, fraction bar
kesişim: intersection
kesişim noktası: intercept
kesit: section
kenar: side
kenarortay: median
kentilyon: quintillion (...milyar, trilyon, katrilyon, kentilyon...)
keyfi sabit: arbitrary constant
kısmi: partial
kilo: kilo...*(metre, gram...)*, weight *(ağırlık)*
kiriş: chord
kologaritma (negatif log.): cologarithm
kombinasyon: combination
komisyon: commission
komşu: adjacent *(trigonometri)*
koni: cone
koordinat: coordinate
korelasyon *(karşılıklı ilişki)*: correlation

kosekant (cosekant): cosecant
kosinüs (cosinüs): cosine
koşullu olasılık: conditional probability
kotanjant: cotangent
kök: root
kök içi: radicand
kök işareti: radical symbol
köşe: corner, vertice
köşegen: diagonal
köşeli parantez: square brackets, box brackets
kural: law, rule
kutu: box, cuboid
kutupsal: polar
kuvvet (üs): power, exponent, index
küçük: small
küçük harf: lowercase
küme: set, cluster
küp: cube
küre: sphere
kütle: mass *(bkz: ağırlık)*
kütle merkezi: centroid, center of mass

L

limit: limit
liste yöntemi *(küme)*: list method, roster method
litre: litre, liter
ln: ln (natural logarithm)
logaritma: logarithm

M

madeni para: coin
maksimum: maximum
maliyet: cost
mantık: logic
matematik: math, mathematics
matris (dizey): matrix
merkez: centre, center
mesafe (uzaklık): distance
metod (yöntem): method
metre: metre, meter
metre kare: square meter
metre küp: cubic metre
metrik sistem (uluslar arası birim sistemi): metric system, international system(sı)
miktar (nicelik): quantity
mil: mile *(bkz: kara mili, deniz mili)*
mili (*metre, gram...*): milli...
milyar: billion
milyon: million
milyonda bir: millionths
minimum: minimum
mod: mode

modül (mutlak değer): modulus, absolute value
monoton: monotonic
mutlak değer: absolute value
mutlak parantezi: bars

N

negatif logaritma (kologaritma): cologarithm **net ağırlık:** net weight
nicel sayı *(miktar olarak)*: cardinal number
niceleyici: quantifier
nicelik (miktar): quantity
nokta: point, dot *(grafik)*
normal dağılım: normal distribution
notasyon (gösterim): notation
numara: no, number

O

odak noktası: focus
olasılık: probability, possibility
olay: event
olmayan: non
olmayana ergi: proof by contradiction
on: ten
onbir: eleven
onda bir: tenths ("ths" ile ilerler)**,** tithe
oniki: twelve
oniki yüzlü *(katı cisim)*: dodecahedron (özel bir şekil)
ondalık (on tabanında): decimal, base ten system
ondalık açılım: decimal expansion
ongen: decagon
ons: ounce (yaklaşık 28 gr)
oran: ratio, rate
oranlı (rasyonel) sayı: rational number
orantı: proportion
ordinat: ordinate
orijin: origin
orta: middle, mid
orta dikme: perpendicular bisecting
orta nokta: midpoint
orta taban: median, midline
ortak: common
ortak (eş) düzlemli: coplanar
ortak (eş) eksenli: coaxial
ortak (eş) merkezli: concentric
ortak özellik yöntemi *(küme)*: set builder notation

ortalama: mean, average
ortanca (medyan): median
oval: oval

Ö

ölçek: scale
ölçmek: measure
ölçü: measure
önceki (öncül): predecessor
önerme: statement *(mantıksal),* proposition
örnek: example
örten: surjective *(bkz: bire bir, bire bir – örten)*
örüntü: pattern
öteleme: translation, moving
öyle ki: such that
öz alt küme: proper subset
özellik: property

P

parabol: parabola
paradoks: paradox
paralel: parallel
paralelkenar: parallelogram
parametre: parameter
parantez (ayraç): bracket, paranthessis, round brackets (bkz: süslü, köşeli parantez)
parça: segment
pasta grafiği: pie chart/graph
pay: numerator
payda: denominator
paydaları eşit kesirler: like fractions
paydaları eşit olmayan kesirler: unlike fractions
pergel: compasses, dividers
periyot: period
permütasyon: permutation
perspektif: perspective
pi sayısı: pi (3,14 ...)
piramit: pyramid
polinom: polynom
postülat: postulate
pound: pound *(ağırlık birimi, yaklaşık 0,45 kg)*
prizma: prism
problem: problem

R

radyan: radian
rakam: numeral

rank: rank
rasgele: random
rasyonel: rational
rasyonel (oranlı) sayı: rational number
reel (gerçel): reel, real
roma rakamları: roman numerals

S

saat: hour *(süre olarak)*
saat yönü: clockwise
saat yönü tersi: counterclockwise, anticlockwise
sabit: constant, stationary *(dizi)*
sadeleştirmek: simplify, reduce *(indirgeyerek),* cancel *(yok ederek)*
sağ türev: right-hand derivative
salise: split-second
sanal: imaginary
saniye: second, second hand *(analog saatte)*
santi *(metre, gram...)*: centi...
santigrat: centigrade, celsius
sayı: number
sayı boncuğu (abaküs): abacus
sayı çifti (sıralı ikili): ordered pair
sayısal: numerical
sayma: counting
sayma sayısı: natural/counting number *(bkz: doğal sayı)*
sekant: secant
sekiz: eight
sekiz yüzlü *(katı cisim)*: octohedron
sekizgen: octagon
seri: serie
sıcaklık: temparature
sıfır: zero, oh *(telefon ve saat)*, null (nil), nought (naught), cipher ve cypher *(eski bir terim olarak)*
sınıflandırma: classification
sınır: boundary
sınırsız: unbounded
sıra (satır): row
sıral sayı *(sıralama)*: ordinal number
sıralı: ordered
sıralı ikili (sayı çifti): ordered pair
sıvı: liquid
silindir: cylinder
sinüs: sine
simetri: symmetry
sol türev: left-hand derivative
somut: concrete
sonlu: finite
sonraki (ardıl): successor
sonsuz: infinite

sonuç: result, conclusion
soru: question
soyut: abstract
spiral: spiral
standart form (bilimsel gösterim): standard form, scientific notation
standart sapma: standart deviation
süslü parantez (kaşlı ayraç): braces, curly brackets, set brackets
sürat: speed (skaler) *(bkz:hız)*
sütun: column
sütun grafiği: bar graph

Ş

şekil: shape, figure
şema: diagram

T

taban: base *(şekil)*, floor *(değer)*
taban eleman sayısı: radix *(2 tabanında 2 (0,1), 10'da 10)*
tablo: table
tahmin etmek: estimate
tam açı: full rotation, perigon angle
tam sayı: integer
tam sayılı kesir: mixed fraction
tanım: definition
tanım kümesi: domain
tanımlı: defined
tanımsız: undefined
tanjant: tangent
taramak *(geometri)*: shade
taslak: sketch
tavan: ceiling *(değer)*
teğet: tangent
tek *(sayı)*: odd
tek basamaklı: single digit
tek değerli (bir değerli): unique *(bire bir gibi)*
temel: fundamental, basis
teori (teorem): theory, theorem
tepe noktası: apex
terazi: scales, balance
terim: term
ters: inverse *(bkz: çarpmaya göre ters)*, vertical *(açı)*
ters: inverse
test: test *(bkz: deney)*
totoloji: tautology
ton: tonne *(ağırlık)*

toplam: sum, total, sigma notation and summation *(toplam çarpım olarak)*
toplama işlemi: addition
transpoz (devrik): transpose
trigonometri: trigonometry
trilyon: trillion
tura: head
tüm (bütün): whole, all, total
tümdengelim: proof by deduction
tümevarım: proof by induction
tümleyen: complement, complementary *(açı)*
türev: derivative

U

uluslar arası birim sistemi: SI unit system
uygulama: practice
uzaklık (mesafe): distance
uzunluk: length

Ü

ücret (fiyat): price
üç: three
üç kere/kez: thrice, treble, triple
üç terimli polinom: trinominal *(bkz: bir terimli polinom, iki terimli polinom)*
üçgen: triangle
üçlü: triplet
üçüncü: third
üçüncü dereceden: cubic
üs (kuvvet): exponent, power, index
üslü sayı: exponent
üst: top
üstel: exponential

V

vardır: exist
varsayım (hipotez): hypothesis, assumption
varyans: variance
vektör (yöney): vector
ven şeması: venn diagram
veri: data

Y

yaklaşık: approximate
yaklaşım: approximation

yakınsak: convergent
yalnız bırakmak: isolate
yamuk: trapezoid *(bkz: dik yamuk)*
yanal alan: lateral area
yansıma: reflection
yarda: yard (3 ayak, 36 inç, 0,9144 metre)
yardımcı önerme: lemma
yarı...: semi...
yarı açık aralık: half-open interval *(left-open, right- open)*
yarım: half
yarım daire: semicircle
yarım küre: hemisphere
yarıçap: radius
yatay: horizontal
yatay eksen (x ekseni): x-axis, horizontal axis
yay: arc *(geometri)*
yazı: tail *(madeni para)*
yedi: seven
yedigen: heptagon, septagon
yelkovan: minute hand *(analog saat)*
yerine koymak: subsitute
yerel: local
yıl: year
yol: way
yöndeş: corresponding *(açı)*
yöney (vektör): vector
yöntem (metod): method
yutan: absorbing *(eleman, küme)*
yuvarlamak: round
yükseklik (boy): height
yüz: hundred
yüzde: percent, percentage
yüzde bir: hundredths, centesimal
yüzey: surface
yüzyıl: century

Z

zaman: time
zar: dice, die
zarar: loss
zeka oyunu: brain teaser
zirve: apex *(tepe noktası)*

DICTIONARY OF
MATHEMATICS

CHAPTER III
EXTRA

SAYILAR / NUMBERS

1 – One	11 – Eleven	21 – Twenty one
2 – Two	12 – Twelve	22 – Twenty two
3 – Three	13 – Thirteen	...
4 – Four	14 – Fourteen	
5 – Five	15 – Fifteen	30 – Thirty
6 –Six	16 – Sixteen	40 – Forty
7 – Seven	17 – Seventeen	50 – Fifty
8 – Eight	18 – Eighteen	60 – Sixty
9 – Nine	19 – Nineteen	...
10 – Ten	20 - Twenty	

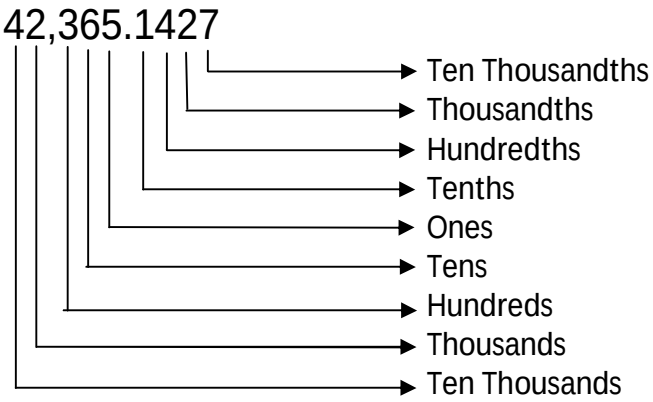
100 – Hundred
1000 – Thousand
1.000.000 – Million
1.000.000.000 – Billion
1.000.000.000.000 – Trillion
1.000.000.000.000.000 – Quadrillion
1.000.000.000.000.000.000 – Quentillion ...

ÖRNEK / EXAMPLE:
278 = Two hundred seventy eight
5239 = Five thousand two hundred thirty nine

SIRA SAYILARI / ORDINAL NUMBERS

1st	First	11th	Eleventh	21st	Twenty-first
2nd	Second	12th	Twelfth	22nd	Twenty-second
3rd	Third	13th	Thirteenth	23rd	Twenty-third
4th	Fourth	14th	Fourteenth	24th	Twenty-fourth
5th	Fifth	15th	Fifteenth	...	
6th	Sixth	16th	Sixteenth		
7th	Seventh	17th	Seventeenth		
8th	Eighth	18th	Eighteenth		
9th	Ninth	19th	Nineteenth		
10th	Tenth	20th	Twentieth		

BASAMAK DEĞERLERİ / PLACE VALUES



ROMA RAKAMLARI / ROMAN NUMERALS

S – 0,5
I – 1
II – 2
III – 3
IV – 4
V – 5
VI – 6
VII – 7
VIII – 8
IX – 9
X – 10
L – 50
C – 100
D – 500
M - 1000
$\overline{V}$ – 5000
$\overline{X}$ – 10.000
$\overline{L}$ – 50.000
$\overline{C}$ – 100.000
$\overline{D}$ – 500.000
$\overline{M}$ – 1.000.000

ÖRNEK / EXAMPLE:
CM – 900
MMMM – 4000
XLVIII – 48
CCVII – 207
MLXVI – 1066
MCMV – 1905
LXXXVII – 87

MATEMATİKSEL SEMBOLLER ve İFADELER / MATHEMATICAL SYMBOLS and EXPRESSIONS

$x = y$	x is equal to y, x equals y
$x \neq y$	x is not equal to y
$x + y$	x plus y
$5 + 2$	add 2 to 5
$x - y$	x minus y
$5 - 2$	subtract 2 from 5
$x \cdot y$ or $x \times y$	x times y; x multiplied by y
$50 . 2$	multiply 50 by 2
$x \div y$ or x/y	x divided by y
$50 \div 2$	divide 50 by 2
$x > y$	x is greater than y
$x < y$	x is less than y
$x \geq y$	x is greater than or equal to y
$x \leq y$	x is less than or equal to y
$x \approx y$	x is approximately equal to y
$\forall x$	for all; for any; for each x
$\exists x$	there is; there exist; there are x
$x \in A$	x is an element of set A
$x \notin A$	x is not an element of set A
$x \mid$ or $x :$	x such that
$A \subset B$	A is a subset of B
$A \supset B$	A is a superset of B
$A \cup B$	the union of A and B
$A \cap B$	the intersection of A and B
$A \cong B$	A is congruent to B
$x \parallel y$	x is paralel to y
$p \wedge q$	p and q

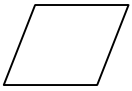
p V q	p or q
~p or p´	not p
p ⇒ q	if p then q
p ⇔ q	p if and only if q
$\mathbb{N}$	natural numbers
$\mathbb{Z}$	integers
$\mathbb{Q}$	rational numbers
$\mathbb{R}$	real numbers
$\mathbb{C}$	complex numbers
$\mathbb{Z}_n$	integers modulo n
x^2	x squared
x^3	x cubed
x^n	n'th power of x, x to the n, x to the power of n
$\sqrt{x}$	square root of x
$\sqrt[3]{x}$	cube root of x
$\sqrt[n]{x}$	n'th root of x
$1/2$	a half (one half)
$3/4$	three quarters
a/b	a over b
$2/3$	two thirds, two over three
$8/10$	eight tenths, eight over ten
|x|	absolute value of x

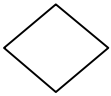
GEOMETRİK ŞEKİLLER / GEOMETRİC SHAPES

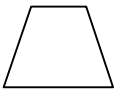

Triangle

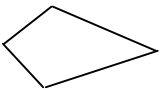

Square

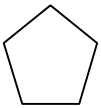

Rectangle

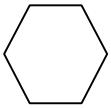

Paralellogram

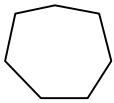

Rhombus

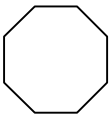

Trapezoid

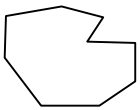

Kite


Pentagon

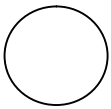

Hexagon

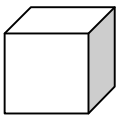

Heptagon

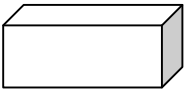

Octagon

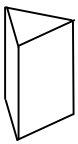

Nonagon

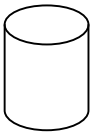

Decagon

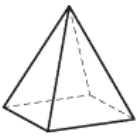

Circle


Cube

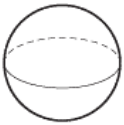

Rectangular Prism


Triangular Prism


Cylinder


Square Pyramid


Cone


Sphere