



Math Vocabulary - Word Origins

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For the math vocabulary below, the origin of the word is explained first*

(origin = what language did the work come from; what do the roots of the words mean literally in that language?)

For the language of origin, the last language listed is the earliest known origin.

A definition is listed below the origin.

Mathematics

From Middle English *mathematik*, from Old French *mathematique*, from Latin *mathēmatica*, from Greek *mathēmatikē* (tekhne), *mathematical (science)*, feminine of *mathēmatikos*, *mathematical*.

The study of the measurement, properties, and relationships of quantities and sets, using numbers and symbols.

Arithmetic

from Greek *arithmētikē* (tekhne), (*art*) of counting, feminine of *arithmētikos*, from *arithmein*, to count

The mathematics of integers, rational numbers, real numbers, or complex numbers under addition, subtraction, multiplication, and division.

Algebra

Middle English, *bone-setting*, and Italian, *algebra*, both from Medieval Latin, from Arabic *al-jabr* (wa-l-muqābala), *the restoration (and the compensation), addition (and subtraction)* : *al-*, the + *jabr*, *bone-setting, restoration* (from *jabara*, to set (bones), force, restore. See *gpr* in Semitic Roots)

A branch of mathematics in which symbols, usually letters of the alphabet, represent numbers or members of a specified set and are used to represent quantities and to express general relationships that hold for all members of the set.

Calculus

Latin, *small stone used in reckoning*.

The branch of mathematics that deals with limits and the differentiation and integration of functions of one or more variables.

Geometry

Middle English *geometrie*, from Old French, from Latin *geōmetria*, from Greek *geōmetriā*, from *geōmetrein*, to measure land : *geō-*, *geo-* + *metron*, *measure*; see *mē-* in Indo-European Roots.

The mathematics of the properties, measurement, and relationships of points, lines, angles, surfaces, and solids.

Trigonometry	<p>New Latin <i>trigōnometria</i> : Greek <i>trigōnon</i>, <i>triangle</i>; see trigon + Greek <i>-metriā</i>, <i>-metry</i></p> <p>The branch of mathematics that deals with the relationships between the sides and the angles of triangles and the calculations based on them, particularly the trigonometric functions.</p>
Quadratic	<p>Middle English <i>quadrat</i>, <i>something square</i>, from Latin <i>quadrātum</i>, from neuter past participle of <i>quadrāre</i>, <i>to make square</i>, from <i>quadrum</i>, <i>square</i>. See k^wetwer- in Indo-European Roots.</p> <p>Relating to or containing terms with powers no higher than the 2nd power.</p>
Trapezoid	<p>Late Latin <i>trapezium</i>, <i>trapezoid</i>, from Greek <i>trapezion</i>, diminutive of <i>trapeza</i>, <i>table</i> : <i>tra-</i>, <i>four</i>; see k^wetwer- in Indo-European Roots + <i>peza</i>, <i>foot</i>; see <i>ped-</i> in Indo-European Roots.</p> <p>A quadrilateral (four-sided figure) that has exactly two sides parallel.</p>
Quotient	<p>Middle English <i>quocient</i>, from Latin <i>quotiēns</i>, <i>quotient-</i>, <i>how many times</i>, from <i>quot</i>, <i>how many</i>. See k^wo- in Indo-European Roots.</p> <p>The answer to a division problem.</p>
Isosceles	<p>Late Latin <i>īsoscelēs</i>, from Greek <i>īsoskelēs</i> : <i>īso-</i>, <i>iso-</i>, <i>same</i> + <i>skelos</i>, <i>leg</i></p> <p>Having two equal sides: <i>an isosceles triangle</i>.</p>
Hypotenuse	<p>Latin <i>hypotēnūsa</i>, from Greek <i>hupoteinousa</i>, from feminine present participle of <i>hupoteinein</i>, <i>to stretch or extend under</i> : <i>hupo-</i>, <i>hypo-</i> + <i>teinein</i>, <i>to stretch</i>; see <i>ten-</i> in Indo-European Roots</p> <p>In a right triangle, the side opposite to the right angle.</p>
Asymptote	<p>Ultimately from Greek <i>asumptōtos</i>, <i>not intersecting</i> : <i>a-</i>, <i>not</i>; see <i>a⁻¹</i> + <i>sumptōtos</i>, <i>intersecting</i> (from <i>sumpiptein</i>, <i>sumptō-</i>, <i>to converge</i> : <i>sun-</i>, <i>syn-</i> + <i>piptein</i>, <i>to fall</i>; see <i>pet-</i> in Indo-European Roots).</p> <p>A straight line that is a close approximation to a curve as the curve goes off to infinity.</p>
Reciprocal	<p>From Latin <i>reciprocus</i>, <i>alternating</i>. See per¹ in Indo-European Roots</p> <p>The reciprocal of a number, <i>a</i>, is $1/a$, (<i>a</i> cannot be zero).</p>

*All origin root definitions taken from www.dictionary.com

EXERCISE QUIZ #1

Match the words on the left with the language of origin to the right.

Note: Some languages may be used more than once.

- | | |
|-----------------------|-----------|
| 1. _____ asymptote | A. Arabic |
| 2. _____ arithmetic | B. Greek |
| 3. _____ calculus | C. Latin |
| 4. _____ geometry | |
| 5. _____ algebra | |
| 6. _____ trapezoid | |
| 7. _____ isosceles | |
| 8. _____ quotient | |
| 9. _____ trigonometry | |
| 10. _____ quadratic | |

EXERCISE QUIZ #2 Match the math words on the left with the meaning of the word or root in its language of origin.

- | | |
|-----------------------|---------------------|
| 1. _____ asymptote | A. table; four |
| 2. _____ arithmetic | B. measure land |
| 3. _____ calculus | C. to make square |
| 4. _____ geometry | D. how many times |
| 5. _____ algebra | E. not intersecting |
| 6. _____ trapezoid | F. triangle |
| 7. _____ isosceles | G. small stone |
| 8. _____ quotient | H. to count |
| 9. _____ trigonometry | I. equal legs |
| 10. _____ quadratic | J. bone-setting |

ANSWER KEYS

EXERICSE #1

1. B
2. B
3. C
4. B
5. A
6. B
7. B
8. C
9. B
10. C

EXERCISE #2

1. E
2. H
3. G
4. B
5. J
6. A
7. I
8. D
9. F
10. C