

Hanover Schools Mathematics Mastery Vocabulary

Grade 8 Glossary

From <http://www.doe.mass.edu/frameworks/current.html>

Glossary Sources

- (H) Harcourt Animated Math Glossary. Referenced February 29–March 2, 2000.
<www.hbschool.com/glossary/math/glossary8.html>
- (W) Merriam-Webster's Collegiate Dictionary. Referenced February 29–March 2, 2000.
<m-w.com/dictionary.htm>

Cartesian plane or Euclidean plane A coordinate plane with perpendicular coordinate axes.

Dilation A type of transformation of the plane that fixes a point C (the *center* of the dilation) and maps any other point P to the point P' characterized as follows: the segment CP' has the same direction as the segment CP , and has length k times the length of the segment CP , where k is a positive constant (the *scale factor* of the dilation).

Function A mathematical relation that associates each object in a set with exactly one value.

Irrational number A number that cannot be expressed as a quotient of two integers, e.g., $\sqrt{2}$. It can be shown that a number is irrational if and only if it cannot be written as a repeating or terminating decimal.

Linear equation Any equation that can be written in the form $Ax + By + C = 0$ where A and B cannot both be 0. The graph of such an equation is a line.

Pythagorean theorem For any right triangle, the sum of the squares of the measures of the legs equals the square of the measure of the hypotenuse.

Rational number A number that can be written as the ratio of an integer to a counting number; or more formally, a number that can be expressed as a ratio a/b where a and b are integers and $b \neq 0$, e.g., 0.5, $3/5$, -3, 8, $3-9/10$.

Real number A number from the set of numbers consisting of all rational and all irrational numbers.