

Web Enhanced Study Guide for Mathematics or Geometry

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The Set of Quadrilaterals in Geometry * Parallelograms * Non-Parallelograms Mathematics Spoken Here Dictionary

Square: Square -- from *MathWorld*

The term "square" can be used to mean either a square number (" x^2 is the square of x ") or a geometric figure consisting of a convex quadrilateral with sides of equal length that are positioned at right angles to each other as illustrated above. In other words, a square is a regular polygon with four sides.

<http://mathworld.wolfram.com/Square.html> - 32k - 2003-01-19

Rectangle: Rectangle -- from *MathWorld*

A closed planar quadrilateral with opposite sides of equal lengths a and b , and with four right angles. The area of the rectangle is $A=ab$, and its polygon diagonals p and q are of length $p=q=\sqrt{a^2+b^2}$. A square is a degenerate rectangle with $a = b$. A number of important topological surfaces are derived from rectangles.

<http://mathworld.wolfram.com/Rectangle.html> - 20k

Rhombus: Rhombus -- from *MathWorld*

A quadrilateral with both pairs of opposite sides parallel and all sides the same length, i.e., an equilateral parallelogram. The word rhomb is sometimes used instead of rhombus, and a rhombus is sometimes also called a diamond. A rhombus with $\theta=45^\circ$ is sometimes called a lozenge.

<http://mathworld.wolfram.com/Rhombus.html> - 22k - 2003-08-13

Rhomboid: Rhomboid -- from *MathWorld*

A parallelogram in which angles are oblique and adjacent sides are of unequal length. See also: Bar Polyiamond, Diamond, Kite, Lozenge, Parallelogram, Quadrilateral, Rhombus, Skew Quadrilateral, Trapezium, Trapezoid

<http://mathworld.wolfram.com/Rhomboid.html> - 17k

Non-Parallelograms

Trapezoid: Trapezoid -- from *MathWorld*

A trapezoid is a quadrilateral with two sides parallel. The trapezoid is equivalent to the British definition of trapezium (Bronshtein and Semendyayev 1977, p. 174). The trapezoid depicted has central median $m=\frac{1}{2}(a+b)$, and area $A=\frac{1}{2}(a+b)h=mh$. The geometric centroid lies on the main diagonal.

<http://mathworld.wolfram.com/Trapezoid.html> - 20k - 2003-08-15

Trapezium: Trapezium -- from *MathWorld*

There are two common definitions of the trapezium. The American definition is a quadrilateral with no parallel sides. The British definition for a trapezium is a quadrilateral with two sides parallel (Bronshtein and Semendyayev 1977, p. 174). Such a trapezium is equivalent to a trapezoid and therefore a quadrilateral.

<http://mathworld.wolfram.com/Trapezium.html> - 18k

The WWW resource for this WESG is [MathWorld](#) & [Math Spoken Here](#).
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