

Geometry and Measurement Vocabulary (For Middle School Teachers)

A

- **Acute angle** – an angle whose measure is between 0 and 90 degrees.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=3>
- **Acute triangle** – a triangle with each interior angle measuring less than 90 degrees.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=4>
- **Adjacent angle** – two angles in the same plane that have a common vertex and a common side, but no common interior points.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=7>
- **Angle** (between lines in a plane) – given two intersecting lines or line segments, the amount of rotation about the point of intersection (the vertex) required to bring one line into correspondence with the other is called the angle between them.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=15>
- **Angle bisector** – a line or line segment which divides the angle into two equal parts.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=23>
- **Angle of incidence** – the angle that a line makes with a line perpendicular to the surface, at the point of incidence.
- **Angle of reflection** – the angle of reflection of a ray or a beam is the angle measured from the reflected ray, to a line perpendicular to the surface at the point of incidence. The angle of reflection is always equal to the angle of incidence. i.e. a ray of light bounces off a surface at the same angle at which it hits the surface.
 - <http://scienceworld.wolfram.com/physics/AngleofReflection.html>
- **Angle of rotation** – the number of degrees that a figure is rotated about a fixed point.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=35>
- **Area of a circle** – the measurement of the region enclosed by a circle. The area of a circle with radius r , equals πr^2 square units.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=39>

- **Area of a polygon** – a measurement of the region enclosed by the sides of a polygon. The area is always expressed in squared units.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=40>
- **Axiom** – a statement whose truth is either to be taken as self-evident or to be assumed.
- **Axis** – a reference line used in a graph or coordinate system, with respect to which a curve or figure is drawn, measure, rotated etc.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=47>

B

- **Base of a polygon** – for two-dimensional figures, any side can be a base. Typically, however, the bottom side, on which the polygon ‘rests’, is called the base.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=52>
- **Bilateral symmetry** – a plane figure is said to have bilateral symmetry about a line l if, whenever p is a point on the figure so is p' , where p' is the mirror image of p about the line l .
- **Bisect** – to cut into equal parts.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=409>

C

- **Cartesian coordinate system** – the Cartesian coordinate system in two dimensions is defined by two axes, at right angles to each other forming a plane (xy -plane). The horizontal axis is labeled x , and the vertical axis is labeled y . In a three dimensional coordinate system, another axis, normally labeled z , is added, providing a sense of a third dimension of space measurement. The axes are each at a right angle to the other.
 - For more info:
 - http://en.wikipedia.org/wiki/Cartesian_coordinate_system
- **Center of dilation** – the center of a transformation that produces an image that is the same shape as the original.
 - For more info:
 - <http://regentsprep.org/Regents/math/codilate/Ldilate.htm>
- **Center of rotation** – in a rotation, the point that does not move. The rest of the plane rotates around this one fixed point.
 - For more info:
 - http://www.mathwords.com/c/center_of_rotation.htm
- **Circle** – a set of points on a plane that are equidistant from a given point (its center).
 - For more info:

<http://mathworld.wolfram.com/Circle.html>

- **Circumference** – the perimeter of a circle.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=70>
- **Collinear** – points are collinear if they lie on the same straight line.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=74>
- **Compass** – an instrument used for drawing circles or arcs, or for transferring the distance between two points from one place to another.
- **Complementary angles** – complementary angles are two angles whose sum is 90 degrees.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=82>
- **Cone** – it is the curved surface formed by lines (generators) joining a fixed point (vertex) to the points on a curve, the generators being extended indefinitely in both directions. In elementary work, a cone usually consists of a circle as base, a vertex lying directly above the centre of the circle and the curved surface formed by the line segments joining the vertex to the points of the circle.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=86>
- **Congruent figures** – figures having the same size and shape.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=87>
- **Conjecture** – a proposition which is consistent with known data, but has neither been verified nor shown to be false.
- **Constant of proportionality** – the constant value of the ratio of two quantities x and y ; usually written $y = kx$, where k is the constant of proportionality.
- **Constant term** – a symbol representing a value that does not change. It is the term of a polynomial (in x) which does not involve x .
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=88>
- **Construct** – to draw (a geometric figure) that meets specific requirements.
- **Contraction (of a geometric figure)** – a transformation in which all distances are shortened by a common factor. This is done by contracting all points toward some fixed point.

- **Conversion factor** – factor by which a quantity that is expressed in one set of units must be multiplied in order to convert it into another set of units.
- **Coordinate** – an ordered pair, (x, y) , that locates a point in a coordinate plane.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=91>
- **Corresponding angle** – angles that have the same relative positions in geometric figures.
 - For more info:
 - http://www.harcourtschool.com/glossary/math_advantage/definitions/corresponding_a8.html
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=92>
- **Corresponding sides** – sides that have the same relative positions in geometric figures.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=93>
- **Co terminal angle** – Two angles that have the same initial side and share the same terminal side are called conterminal angles. The idea is that you start at the same initial side and end at the same terminal side, but the ray that created the angle may rotate either in a positive or negative direction.
 - For more info:
 - <http://www.mathwords.com/c/coterminal.htm>
- **Cuisenaire rods** – a collection of rectangular rods in 10 lengths and 10 colors, each color corresponding to a different length. Cuisenaire rods provide a mathematical hands-on learning experience that allows students to explore whole numbers, fractions, measurement, ratio, area, perimeter, symmetry, congruence, three-dimensional geometry, patterns, and functions. The rods also allow a concrete way of looking at math, and are available in both wood and plastic.
 - For more info:
 - http://www.fun-books.com/books/cuisenaire_rods.htm
- **Customary system (of measurement)** – the measurement system often used in the United States, using inches, feet, miles, ounces, pounds, quarts, gallons, etc.
- **Cylinder** – is a surface, consisting of points on the lines (generators) drawn through the points on a fixed curve and parallel to a fixed line, the generators being extended indefinitely in both directions. In elementary work, a cylinder with its axis vertical would be reckoned to consist of a circular base, a circular top of the same size, and the curved surface formed by the lines joining them.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=101>

D

- **Deductive reasoning** – a method of reasoning in which the beginning point is an assumption and the conclusion is reached by a sequence of logical steps.
- **Diagonal** – a line segment formed by connecting two nonadjacent vertices (i.e., not on the same side) in a polygon or a polyhedron.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=110>
- **Diameter** – the line segment that includes the center and whose endpoints lie on the circle.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=111>
- **Dilation** – a similarity transformation that may change the size of an object, but not the shape.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=114>
- **Dimension** – the width, length, and height of a plane or figure. Also, it is the number of coordinates needed to specify a point on the object. For example, a rectangle is two-dimensional, while a cube is three-dimensional
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=115>
- **Dimensional analysis** – a mathematical tool often applied in physics, chemistry, and engineering to simplify a problem by reducing the number of variables to the smallest number of “essential” parameters. System which share these parameters are called similar and do not have to be studied separately.
- **Distance** – the distance between two points is the length of a straight line between them. The distance between points a and b on the real line is $|a - b|$. The distance in two dimensions, say between (x_1, y_1) and (x_2, y_2) is $\sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$
 - For more info: <http://mathworld.wolfram.com/Distance.html>
- **Dodecahedron** – a regular polyhedron whose twelve faces are congruent regular pentagons.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=123>

E

- **Edge** – the intersection of a pair of faces in a three-dimensional figure.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=124>
- **Equiangular** – a shape whose angles are equal.
 - For more info:

<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=129>

- **Equilateral** – a polygon is equilateral if all its sides have the same length.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=130>
- **Euclidean geometry** – the traditional presentation of Euclidean geometry is an axiomatic system, setting out to prove all the "true statements" as theorems in geometry from a set of finite number of axioms. Euclidean geometry is named after the Greek mathematician Euclid.
 - For more info:
http://en.wikipedia.org/wiki/Euclidean_geometry
- **Expansion** – the act of increasing, either in size, volume or quantity.
- **Exterior angle** (of a polygon) – The angle between one side and the extension of an adjacent side of a polygon.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=144>

F

- **Face** – a flat side of a solid figure.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=145>
- **Formula** – an equation that shows a mathematical relationship.

G

- **Generalization** – the process of formulating general concepts by abstracting common properties of instances.
- **Geometer's sketchpad** – a dynamic construction and exploration tool that enables students to explore and understand mathematics.
 - For more info:
<http://www.keypress.com/sketchpad/>
- **Geometric figure** – any point, line, segment, ray, angle, polygon, curve, region, plane, surface, solid, etc. Formally, a geometric figure is any set of points on a plane or in space.
- **Glide-reflection** – a composite transformation where a figure is reflected and then translated.
 - For more info:
http://www.mathwords.com/g/glide_reflection.htm

H

- **Half-plane** – given a line, the set of all points on one side of the line is a half plane. If the line is included in the half plane, then the half-plane is said to be closed. If a line has an equation $ax + by + c = 0$, the set of points (x, y) such that $ax + by + c \geq 0$ forms a closed half plane.

- For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=161>

- **Hexahedron** – a polyhedron, such as a cube, that has six faces.
- **Hypotenuse** – the side of a right-angled triangle opposite the right angle. The hypotenuse is the longest side of a right-angled triangle.
 - For more info:
<http://www.mathwords.com/h/hypotenuse.htm>

I

- **Image** – let f be a function from a set S to a set T denoted as $f : S \rightarrow T$. If x belongs to S , then $f(x)$ is the image of x under f .
 - For more info:
<http://mathworld.wolfram.com/Image.html>
- **Inductive reasoning** – reaching a conclusion based upon a pattern of specific examples or past events.
- **Interior angle** – the angle between two adjacent sides of a polygon that lies inside the polygon. Also, when a third line (a transversal) intersects a pair of lines, eight angles are formed; the four angles between the pair of lines are interior angles.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=179>
- **Intersection of lines** – two lines are said to intersect if they have a unique common point or if they coincide. For example consider the lines given by $y=x$ and $y=2x+1$. The point $(-1, 1)$ is a point of intersection of the two lines.
 - For more info:
<http://id.mind.net/~zona/mmts/intersections/intersectionOfTwoLines1/intersectionOfTwoLines1.html>
- **Intersection of planes** – two planes intersect in a line as long as they are not parallel.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=181>
- **Intersection of sets** – intersection of two sets A and B is the set consisting of all elements that belong to both A and B .
 - For more info:
<http://mathworld.wolfram.com/Intersection.html>
- **Isometry** – a transformation of a geometric figure that preserves the distance between two points. Examples of isometries are translations, rotations and reflections.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=187>

- **Isosceles triangle** – a triangle with at least two sides having equal lengths.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=189>

L

- **Lateral** – relating to or on the side.
- **Length** (of a line segment) – the distance between two ends of a line segment.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=194>
- **Line** – a line is the straight path connecting two points and extending beyond the points in both directions.
- **Line of symmetry** – a line that divides a figure into two parts, each of which is a mirror image of the other.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=199>
- **Line segment** – if A and B are two distinct points on a straight line, the part of the line between and including A and B is a line segment.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=201>
- **Linear measure** – a measurement of length.
- **Linear pair** – a pair of adjacent angles formed by an intersection of a line.
 - For more info:
 - http://www.mathwords.com/l/linear_pair_of_angles.htm
- **Liquid measure** – the measurement of liquid capacity.

M

- **Mass** – a measurement representing the amount of quantity or matter in an object.
- **Measure** – is a function that assigns a number to an object or set.
- **Measurement** – the process of assigning a number to a physical property. Examples of measurement include length, size of an angle, area, volume, mass, time, etc.
- **Metric system (of measurement)** – a system of measurement developed in 1790 by the French Academy of Sciences. The basic units in the metric system are: meter for length; gram for mass; liter for capacity; other units in the metric system are related to the basic units in terms of powers of ten.

- **Midpoint** – the point on a line segment that divides it into two equal parts.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=216>

N

- **Net** – it refers to a plane diagram in which the polyhedron edges of a polyhedron are shown.
- **Nonstandard units of measures** – uncommonly used tools for measurement such as a person's feet or a string of yarn.

O

- **Obtuse angle** – an obtuse angle is greater than 90 degrees but is less than 180 degrees.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=234>
- **Obtuse triangle** – a triangle with one obtuse angle.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=412>
- **Octahedron** – a polyhedron with eight faces.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=236>
- **Ordered pair** – consists of two objects considered in a particular order. If $a \neq b$, the ordered pair (a, b) is not the same as (b, a) .
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=242>
- **Orientation** – the orientation of a shape is the order of its points.

P

- **Parallel lines** – two lines in two-dimensional Euclidean space are said to be parallel if they do not intersect.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=248>
- **Parallel planes** – two planes that do not intersect are said to be parallel.
 - For more info:
 - <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=423>
- **Parallelogram** – a quadrilateral whose opposite sides are parallel.
 - For more info:
 - <http://mathworld.wolfram.com/Parallelogram.html>
- **Pentagon** – a five sided polygon.
- **Perimeter** – the perimeter of a plane figure is the length of its boundary.

- For more info:
<http://mathworld.wolfram.com/Perimeter.html>
- **Perpendicular bisector** – a straight line perpendicular to a line segment which also bisects the line segment.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=258>
- **Perpendicular lines** – two lines are perpendicular if they intersect at a right angle. In coordinate geometry of the plane, the product of the slopes of two perpendicular lines is -1.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=257>
- **Perspective** – the technique of representing three-dimensional objects and depth relationships on a two-dimensional surface.
- **Plane** – a plane is represented by a linear equation of the form $ax+by+cz+d=0$, where the constants a, b, c are direction ratios of a direction normal to the plane.
 - For more info:
<http://mathworld.wolfram.com/Plane.html>
- **Platonic solids** – are convex polyhedra with equivalent faces composed of congruent convex regular polygons. There are exactly five such solids: the cube, dodecahedron, icosahedron, octahedron and tetrahedron.
 - For more info:
<http://mathworld.wolfram.com/PlatonicSolid.html>
- **Point** – a point in Euclidean geometry has no size, orientation, or any other feature except position.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=264>
- **Polygon** – a closed plane figure with n sides.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=266>
- **Polyhedron** – a three-dimensional solid which consists of a collection of polygons, usually joined at their ends.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=267>
- **Postulate** – a statement whose truth is either to be taken as self-evident or to be assumed.
- **Pre-image** – given a function f from a set X to a set Y denoted as $f : X \rightarrow Y$, the pre image of an element y in Y is the set $\{x \in X \mid f(x) = y\}$, i.e. the set of all x in X whose image is y .

- **Prism** – a general prism is a polyhedron possessing two congruent polygonal faces and parallelograms as the remaining faces.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=275>
- **Proof** – a rigorous mathematical argument which unequivocally demonstrates the truth of a given proposition.
- **Properties of equality** – equivalence properties and algebra rules for manipulating equations. For example: reflectivity ($a = a$); symmetry ($a = b$, then $b = a$); transitivity (if $a = b$ and $b = c$ then $a = c$) etc.
 - For more info: http://www.mathwords.com/e/equation_rules.htm
- **Proportion** – an equation which states that two ratios are equal in the form $\frac{a}{b} = \frac{c}{d}$. Each a, b, c, d is called a term of the proportion.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=278>
- **Proportional reasoning** – utilizing reasoning skills by comparing quantities, looking at the relative ways numbers change, and thinking about proportional relationships in linear functions.
- **Pyramid** – a pyramid is a polyhedron with one face (known as the "base") a polygon and all the other faces triangles meeting at a common polygon vertex (known as the "apex").
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=280>
- **Pythagorean Theorem** – gives the relationship between the lengths of the sides of a right angled triangle. The theorem states: In a right angled triangle, the square of the hypotenuse is equal to the sum of the squares of the other two sides.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=281>

Q

- **Quadrant** – one of the four regions on a coordinate plane formed by the intersection of the x-axis and the y-axis.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=283>
- **Quadrilateral** – a polygon with four sides.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=285>

R

- **Rate** – a comparison of two quantities that have different units of measure, with the second unit typically being time. For example, 60 miles per hour.
- **Ratio** – a comparison of two quantities that have the same unit of measure; or a quotient of two numbers.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=296>
- **Ray** – the part of a straight line extending from a point indefinitely in one direction.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=298>
- **Reciprocal** – the multiplicative inverse of a quantity. For example the reciprocal of 2 is $\frac{1}{2}$, the reciprocal of $3x + 4$ is $\frac{1}{3x + 4}$ with $3x + 4 \neq 0$.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=406>
- **Reduction** – a dilation or similarity transformation with a center c and a scale factor n , where $0 < n < 1$.
- **Reference angle** – for any given angle, its reference angle is an acute version of that angle. The acute angle may be used as a reference to compute the trigonometric functions of non-acute angles. For example: An angle of 45° degrees is a reference angle for 135° , 225° , and 315° .
 - For more info:
http://www.mathwords.com/r/reference_angle.htm
- **Reflection** – a transformation in which a geometric figure is reflected across a line known as the axis of reflection, creating a mirror image.
 - For more info:
<http://www.mathwords.com/r/reflection.htm>
- **Reflectional symmetry** – a figure has reflectional symmetry if it can be folded along a line and the two parts coincide.
 - For more info
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=431>
- **Regular polygon** – a polygon whose sides (or angles) have the same measure.
 - For more info:
http://www.mathwords.com/r/regular_polygon.htm

- **Regular polyhedron** – a 3-dimensional solid that has congruent regular polygons as faces and congruent angles between all faces.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=306>
- **Right angle** – an angle that measures exactly 90 degrees.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=311>
- **Right triangle** – a triangle with exactly one right angle.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=411>
- **Rotation** – a transformation that turns a figure about a fixed point at a given angle and direction.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=313>
- **Rounding** – in rounding, the original number is replaced by the number with the required number of digits that is closest to it. For example: when rounding to one decimal place, the number 1.875 becomes 1.9 and the number 1.845 becomes 1.8.

S

- **Scale** – a scale is either a device used for measurement of weights, or a series of ratios against which different measurements can be compared.
- **Scale factor** – the ratio of lengths of corresponding sides of two similar figures.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=318>
- **Scalene triangle** – a triangle in which all three sides have different lengths.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=319>
- **Segment** (of a circle) – region bounded by an arc AB of the circle and the chord AB.
 - For more info: <http://mathworld.wolfram.com/CircularSegment.html>
- **Side of a polygon** – a straight line segment that forms part of a polygon.
 - For more info: <http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=330>
- **Similar figures** – two geometrical figures that are of the same shape but not necessarily of the same size. Their corresponding angles are congruent and corresponding sides are proportional in length.
 - For more info:

<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=333>

- **Slope of line** – a quantity which gives the inclination of a line with respect to another line. For a line in the xy -plane making an angle θ with the x -axis, the slope m is a constant given by $m = \tan \theta = \frac{\Delta y}{\Delta x}$ (the ratio is also called rise-over-run; rise is the difference of the y -coordinates, run is the difference of x -coordinates)
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=336>
- **Sphere** – a sphere with centre C and radius r is the locus of all points (in 3-dimensional space) whose distance from C is equal to r .
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=343>
- **Square** – a quadrilateral with sides of equal length that are positioned at right angles to each other.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=344>
- **Square centimeter** – the area of a square with 1-centimeter sides.
- **Square inch** – the area of a square with 1-inch sides.
- **Standard position** – an angle drawn on the x - y plane starting on the positive x -axis and turning counterclockwise.
 - For more info:
http://www.mathwords.com/s/standard_position.htm
- **Standard units of measures** – commonly used units for measurement such as meter, gram, and liter.
- **Straight edge** – tool used for drawing straight lines and measuring lengths.
- **Supplementary angle** – two angles are said to be supplementary if their sum is 180 degrees.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=351>
- **Surface area** – the total area of the exterior surface of a solid.
 - For more info:
http://www.mathwords.com/s/surface_area.htm
- **Symmetry** (about a line) – a plane figure is said to be symmetric about a line l if, whenever p is a point on the figure so is p' , where p' is the mirror image of p about the line l .
 - For more info:

<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=354>

T

- **Tangrams** – a Chinese puzzle consisting of a square cut into five triangles, a square, and a rhombus, to be reassembled into different figures.
 - For more info:
<http://www.strongmuseum.org/kids/tangram.html>
- **Tessellations** – an arrangement of polygonal regions covering a plane without overlapping or leaving any gaps.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=452>
- **Tetrahedron** – a solid figure bounded by four triangular faces, with four vertices and six edges. A regular tetrahedron has equilateral triangles as its faces and all its edges have the same length.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=358>
- **Theorem** – a mathematical statement established by means of proof.
- **Three-dimensional figure** – figures that have length, width, and thickness.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=428>
- **Time** – a number, as of years, days, or minutes, representing an interval.
- **Transformation** – the mapping or movement of all the points of a figure in a plane according to a common operation.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=359>
- **Translation** – a transformation that "slides" each point of a figure the same distance in the same direction.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=360>
- **Transversal** – a line that intersects two or more lines.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=361>
- **Trapezoid** – a quadrilateral with two sides parallel.
 - For more info:
<http://mathworld.wolfram.com/Trapezoid.html>
- **Triangle** – a three sided polygon.

- For more info:
<http://mathworld.wolfram.com/Triangle.html>
- **Trigonometry** – the study of angles and of the angular relationships of planar and three-dimensional figures is known as trigonometry.
- **Two-dimensional figure** – figures that have length and width, but no thickness.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=427>

U

- **Unit analysis** – a method used to convert from one unit of measure to another.
- **Unit rate** – a ratio in which the denominator is 1 unit.
- **Unit** – a fixed amount that is used as a standard of measurement. For example, a mile is a unit of distance, an hour is a unit of time, and a liter is a unit of volume.

V

- **Vertex** (of a polygon) – The common endpoint of two line segments that serve as two sides of a polygon.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=381>
- **Vertical angles** – two nonadjacent angles formed by intersecting lines or segments. Also called opposite angles.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=383>
- **View** – a way of showing or seeing something, as from a particular position or angle.
- **Volume** – the amount of space occupied by an object.
 - For more info:
<http://www.intermath-uga.gatech.edu/dictionary/descript.asp?termID=385>

W

- **Weight** – a measure of the force that gravity exerts on a body.