#### Α

**Absolute Value** the distance a number is from **0** on the number line |3| = |-3|. [L130] **310** 

adjacent angle

| Acute Angle angle that is less than 90°   |
|---|
| Adjacent Angles angles that are next to each other  |
| Adjoining Sides sides that meet to form the angles of a figure [L14] 32                               |
| Alternate Exterior Angles outside angles on different parallel lines [L88] 210                        |
| Alternate Interior Angles inside angles on different parallel lines [L88] 210                         |
| <b>AM</b> (ante meridiem) label for time from midnight up to, but not including, noon [L13] <b>30</b> |
| <b>Angle</b> two rays or line segments that intersect or have the same endpoint [L25] <b>58</b>       |
| <b>Angle Bisector</b> line or line segment dividing an angle into 2 congruent angles . [L88] 210      |
| <b>Arabic Numerals</b> digits used in a base ten (decimal) number system that indicate place          |

 value
 [L54] 128

 Arc continuous section of a circle's circumference
 [L60] 142



R

bar graph

|   | <b>Base</b> a polygon's side or a solid figure's face; usually the bottom, by which the figure is measured or named (for example, square pyramid)                                |
|---|--|
| I | <b>Bilateral Symmetry</b> a characteristic of a figure that, if folded along a line of symmetry, would create two halves that are mirror images of each other [L23] <b>54</b>    |
|   | C  |
| ( | <b>Celsius</b> the metric-system scale for measuring temperature by which there are 100 degrees between the freezing and boiling points of water                                 |
|   | <b>Center</b> the point in a circle that is an equal distance from any point on the circumference of the circle  |
| ( | Central Angle an angle formed at the center of a circle  |
| ( | <b>Central Tendency</b> the numerical average, or "center", of a set of values. Mean, median and mode are all measures of central tendency                                       |
| ( | Certain Event will definitely happen; certain events have probability of 1 [L34] 80  |
| ( | <b>Chord</b> a line segment connecting two points on a circle's circumference [L60] <b>142</b>   |
| • | <b>Circle</b> a closed curve having the same distance between the points on its circumference and a fixed point (the center)   |
|   | <b>Circular Base</b> a special side of a cone or cylinder that forms a closed curve. In a cylinder, there are two circular bases that are parallel and congruent [L15] <b>34</b> |
| ( | <b>Circumference</b> circumference = $2\pi r$ or $\pi d$ . The perimeter of a circle [L60] <b>142</b>  |
| ( | Closed Figure a figure that begins and ends at one point   |
| ( | Combination a possible set of events or items [L150] 358   |
| ( | Commutative Property of Addition the sum remains the same when the order of the addends changes  |
| ( | <b>Commutative Property of Multiplication</b> the product remains the same when the order of the factors changes   |
| ( | Complementary Angles two angles whose sum is 90°   |
| ( | Composite Number a number with more than two factors [L50] 118   |
| ( | Compound Event an event that consists of two or more simple events (events with single outcomes)   |
| ( | <b>Concave Polygon</b> a polygon with four or more sides having at least one internal angle greater than 180°  |
| ( | <b>Cone</b> 3-dimensional geometric figure with one vertex, one curved edge, one circular base and one curved surface  |

|                 | <b>Congruent Figures</b> figures with identical angles and sides of equal lengths. They are the same shape and size  |
|-----------------|--|
| +Y <b>A</b>     | Convex Polygon figure whose internal angles are all less than 180°[Create A Problem 3] 36  |
| -X              | <b>Coordinate Grid</b> area marked by lines upon which multiple points may be located and referenced by their horizontal and vertical distance from the origin [L32] <b>76</b>           |
| coordinate grid | <b>Coordinate Point</b> 2 numbers that describe a point on a coordinate grid; shown for example as (2, -3)   |
|                 | <b>Corresponding Angles</b> two angles that share the same position with respect to the line that intersects two parallel lines  |
|                 | <b>Cost Per Unit</b> the amount of money needed to pay for a measured unit of goods (for example \$1.25 per pound or \$1.50 per dozen)   |
| cube            | <b>Cube</b> 3-dimensional figure with 8 vertices, 12 congruent straight edges and 6 congruent square flat faces  |
| surface         | <b>Curved Edge</b> the curved line segment that forms where a curved surface meets a circular base   |
| edge 🖈          | <b>Curved Surface</b> the curved region on three-dimensional figures [L15] <b>34</b>   |
|                 | <b>Cylinder</b> 3-dimensional figure with 2 curved edges, 2 circular bases and one curved surface  |
|                 | D  |
|                 | <b>Decimal</b> (1) symbol used to separate whole numbers (or dollar amounts) from parts of the whole (or cents), (2) a word that refers to 10, or (3) a math system such as ours that is |
|                 | based on 10 different digits [L35] <b>82</b>   |
|                 |  |
|                 | based on 10 different digits [L35] <b>82</b>   |
|                 | based on 10 different digits   |
| diagonals       | based on 10 different digits   |
| diagonals       | based on 10 different digits   |

|  | give the same result even if the addends are multiplied first and totaled afterward. [L37] <b>88</b>  |
|--|---|
|  | <b>Dividend</b> a quantity to be divided by a divisor   |
|  | <b>Divisor</b> the quantity by which the dividend is to be divided  |
| edge                                   | E, F  |
|  | <b>Edge</b> line segment where 2 faces on a 3-dimensional figure meet; flat or curved [L15] <b>34</b>   |
|  | Empty Set set containing no items. See Null Set [L45] 106   |
|  | <b>Equally Likely</b> events having the same chance or probability of occurring [L34] <b>80</b>   |
|  | <b>Equation</b> number statement that includes an equal symbol (=) [L3] 6   |
|  | <b>Equilateral Triangle</b> plane figure having 3 sides of equal length [L25] 58  |
|  | <b>Equivalent Fractions</b> fractions that have the same value but are expressed with different numbers. For example, 4/8 is equivalent to 2/4 and 1/2 [L18] 42   |
|  | <b>Equivalent Ratios</b> ratios of equal value written as equivalent fractions [L66] <b>158</b>   |
|  | Estimate to calculate a number close to the exact answer  |
| exponent                               | <b>Even Number</b> number that can be divided into two equal groups; even numbers end in 0, 2, 4, 6 or 8  |
| <b>5</b> <sup>3</sup>                  | <b>Exponent</b> in a number given in exponential form, the number that tells how many times the base is used as a factor  |
| Exterior<br>Angle<br>Interior<br>Angle | <b>Exponential Form</b> a way of writing a number using exponents when the same factor is used more than once   |
|  | <b>Exterior Angle</b> an angle on the outside of 2 parallel lines that are intersected by another line  |
|  | Face plane figure that is one side of a 3-dimensional figure  |
|  | <b>Fact Family</b> related addition and subtraction or multiplication and division facts involving the same set of numbers  |
|  | <b>Factor</b> number that divides evenly into another number  |
|  | <b>Factorial</b> a product generated by multiplying a number and every positive number less than the number   |
|  | <b>Fahrenheit</b> (F) temperature scale where the freezing point of water is 32° and the boiling point is 212°. Daniel Gabriel Fahrenheit (1686-1736) invented the Fahrenheit scale and the mercury thermometer |



| 1 |   |
|---|---|
|   | Flat Face 2-dimensional polygon forming one side of a 3-dimensional figure [L15] 34   |
|   | <b>Flip</b> change in location of a figure that results in a mirror image of the original figure; Reflection  |
|   | <b>Formula</b> a mathematical statement or rule used in calculations [L30] <b>70</b>  |
|   | G, H, I   |
|   | <b>Greater Than</b> describes a number of higher, or larger, value than another number; symbol is >   |
|   | <b>Greatest Common Factor</b> the largest factor of two or more numbers [L56] <b>134</b>  |
|   | <b>Greatest to Least</b> arrangement of numbers from highest value to lowest value [L2] 4   |
|   | <b>Height</b> vertical dimension of a 2- or 3-dimensional figure  |
|   | <b>Hexagon</b> polygon with exactly six sides   |
|   | <b>Histogram</b> graph where the labels for the bars are numerical intervals; used to compare and group data  |
|   | <b>Impossible Event</b> an event with a probability of zero   |
|   | <b>Improper Fraction</b> a fraction in which the numerator is greater than or equal to the denominator  |
|   | <b>Independent Variable</b> a variable in a mathematical expression whose value determines the dependent variable   |
|   | <b>Inequality</b> a number statement that compares two unequal expressions [L3] 6   |
|   | <b>Integer</b> a whole number and its opposite (-2,-1,0,1,2) [L130] <b>310</b>  |
|   | <b>Intercept</b> the point where a line or curve meets the x- or y-axis on a grid [L115] 274  |
|   | <b>Interest</b> 1) fee charged by a lender to a borrower for use of money; 2) amount a bank pays to depositors having accounts. Usually described as a percentage of the amount borrowed or deposited measured over a period of time (5% per month) [L110] <b>262</b>                         |
|   | Interior Angle angle on the inside of two parallel lines that are intersected by another line   |
|   | <b>Interquartile Range</b> measure of spread that is determined by arranging data in descending order and determining the difference between Q3 (the value halfway between the maximum and the median) and Q1 (the value halfway between the minimum and the median) [Activity 16] <b>A28</b> |



line graph

| Intersecting Lines lines that cross at some point [L14] 3.                               |
|--|
| <b>Intersection of Sets</b> set of values or items that are common to all the sets being |
| evaluated  |
| <b>Isosceles Triangle</b> triangle having only 2 sides of equal length                   |

#### J, K, L

Leap Year year in the Gregorian calendar in which February has 29 days, resulting in a

| 366-day year   |
|--|
| <b>Least Common Factor</b> smallest factor of two or more numbers [L56] <b>134</b>                               |
| <b>Least to Greatest</b> arrangement of numbers from lowest value to highest value [L2] 4                        |
| <b>Length</b> distance along a figure's longest side from one point to another [L15] <b>34</b>                   |
| <b>Less Than</b> number of smaller, or lesser, value than another number; symbol < [L2] 4                        |
| <b>Likely Event</b> an event with a probability of greater than one half [L34] <b>80</b>                         |
| <b>Line</b> 2-dimensional straight path extending infinitely in both directions without any endpoints            |
| <b>Line Graph</b> a diagram upon which plotted points from a set of data form a line that shows change over time |
| <b>Line of Symmetry</b> line that divides a figure so each portion is a mirror image of the other                |
| Line Segment portion of a line that has two endpoints  |
| <b>Lowest Common Multiple</b> the multiple of two or more numbers that has the least value                       |

#### M

| <b>Mean</b> description of a set of values that is calculated by adding the values and sum by the number of items in the set; <b>Average</b>  | _             |
|---|---------------|
| <b>Median</b> description of a set of values obtained by putting the values in order greatest and selecting the middle value (for an odd number of items) or by camean of the two middle values (for an even number of items) | lculating the |
| Mixed Number number consisting of a whole number and a fraction   | [15] 10       |

|              | <b>Mode</b> description of a set of values that is obtained by selecting the value within the set that occurs most frequently. A set of values may have more than one mode [L65] <b>154</b> |
|--------------|---|
|              | Multiple product of two whole numbers [L1] 2  |
|              | Multiplicand factor being multiplied in a multiplication problem [L6] 14  |
|              | <b>Multiplier</b> factor by which a number is multiplied in a multiplication problem [L6] <b>14</b>   |
|              | N, O  |
|              | Negative Number number less than zero   |
|              | <b>Net</b> a two-dimensional flat shape that can be folded into a three-dimensional solid [L15] <b>34</b>   |
|              | Null Set set containing no items. See Empty Set   |
|              | <b>Numerator</b> portion of a fraction that is written above the line; it represents parts of a whole   |
| btuse angle  | <b>Obtuse Angle</b> angle that measures more than 90° and less than 180° [L25] <b>58</b>  |
| bluse arigic | Octagon polygon with exactly eight sides [L21] 50   |
| <b>↑</b> ↑   | <b>Odd Number</b> number that cannot be divided into two equal groups. Odd numbers end in 1, 3, 5, 7 or 9 [L19] <b>44</b>   |
|              | <b>Open Figure</b> figure that begins and ends at two different points [L21] <b>50</b>  |
|              | <b>Order of Operations</b> the rules describing what sequence of mathematical operations to use when adding, subtracting, multiplying or dividing [L3] <b>6</b>                             |
|              | <b>Order of Symmetry</b> the number of different positions to which a figure can be rotated to match itself exactly   |
|              | <b>Ordered Pair</b> pair of numbers used to locate a point on a coordinate grid. The horizontal (x-coordinate) is given first and the vertical (y-coordinate) is last [L32] <b>76</b>       |
|              | <b>Ordinal Number</b> a whole number that indicates position in a sequence: first, second, third, etc   |
|              | <b>Origin</b> intersection of x- and y-axes on a coordinate grid; designated (0, 0) [L32] <b>76</b>   |
|              | Outlier an extreme deviation from the mean [L70] 166  |
| parallel     | Parallel Lines lines that never cross, no matter how far they extend; always the same distance apart from each other  |

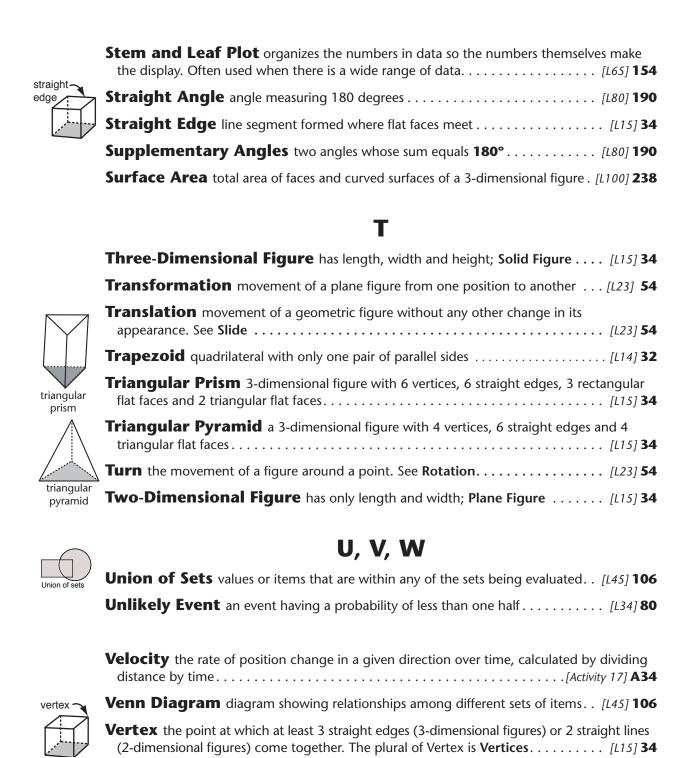
|  | Parallelogram quadrilateral whose opposite sides are parallel and congruent [L14] 32  |
|--|---|
|  | <b>Pattern</b> regularly repeated arrangement of letters, numbers, shapes, etc [L21] <b>50</b>  |
|  | <b>Pentagon</b> polygon with exactly five sides   |
|  | <b>Percent</b> ratio that compares a number to 100 using the % symbol [L44] <b>104</b>  |
|  | <b>Percent Pie Graph</b> a pie (circle) graph in which the sum of the percentages in each section of the graph equals 100 percent [L94] <b>224</b>  |
| <b>↑</b>   | Perimeter distance around a closed figure   |
|  | <b>Permutation</b> one of several possible orders for a series of events or items [L150] <b>358</b>   |
| erpendicular   | <b>Perpendicular Lines</b> lines that intersect to form "square corners" or right angles (90°) where they cross   |
|  | <b>Pi (π)</b> the ratio of the circumference of a circle to its diameter; approximately equal to 3.14, or 22/7  |
|  | Plane Figure has only length and width; Two-Dimensional Figure [L14] 32   |
|  | PM (post meridiem) label for time from noon up to, but not including, midnight [L13] 30   |
|  | <b>Polygon</b> a closed plane figure made up of 3 or more straight lines [L14] <b>32</b>  |
|  | Positive Number a number greater than zero [L63] 150  |
|  | Prime Factor a factor that is also a prime number [L50] 118   |
|  | <b>Prime Number</b> a number that has itself and one as its only factors [L50] 118  |
|  | <b>Probability</b> the likelihood that a future event will occur; expresssed as a value between zero and one, with zero being impossible and one being certain [L34] <b>80</b>                                    |
|  | <b>Product</b> number obtained by multiplying two or more numbers together [L6] <b>14</b>   |
| N  | <b>Profit</b> amount of money a business earns after all expenses are paid [L110] <b>262</b>  |
| C  | <b>Property of One</b> any number multiplied by one has itself as the product [L38] <b>90</b>   |
| b $c^{2} + b^{2} = c^{2}$ $c^{2}$ $c^$ | <b>Proportion</b> an equation that shows two ratios are equal [L40] <b>94</b>   |
|  | <b>Pythagorean Theorum</b> For any right triangle, the area of a square constructed along the triangle's longest side (the hypotenuse) is equal to the sum of the area of squares built along the other two sides |
|  | Q, R  |
|  | Quadrilateral polygon with exactly 4 sides  |
|  | <b>Quotient</b> result obtained by dividing one number by another [L6] <b>14</b>  |



full turn) around its central point and still appear identical to the original...... [L23] **54** 

| Used for estimating or testing the reasonableness of a calculation [L20] 46   |
|---|
| S   |
| Sale Price the sales price of an item after a reduction from its original price [L110] 262  |
| <b>Sales Tax</b> tax paid to government when an item is purchased; usually calculated as a percentage of an item's sales price  |
| <b>Sample</b> group of items selected from a population and used to test hypotheses about the population  |
| <b>Scale</b> making a copy larger or smaller than an original, by a percentage or ratio [L29] <b>68</b>   |
| <b>Scalene Triangle</b> triangle that has three sides with different lengths [L25] <b>58</b>  |
| <b>Scatter Plot</b> graph of data points, usually results from an experiment, used to illustrate the relationship between two variables   |
| <b>Short Division</b> method for performing division without subtraction columns [L82] 196  |
| Similar Figures two figures with the same proportions but not the same size [L23] 54  |
| Simple Event an event that contains a single outcome  |
| <b>Slide</b> movement of a geometric figure without changing its appearance. See <b>Translation</b> [L23] <b>54</b>   |
| <b>Slope</b> slant of a line from left to right. A line that slants upward from left to right has a positive slope; a line slanting downward from left to right has a negative slope. The slope of a line is found by dividing the change in y-value by the change in x-value [L115] <b>274</b> |
| <b>Solid Figure</b> has length, width and height; <b>Three-Dimensional Figure</b> [L15] <b>34</b>   |
| <b>Speed</b> distance traveled during a period of time. <b>Speed</b> = <b>distance</b> ÷ <b>time</b> [L89] <b>212</b>   |
| <b>Sphere</b> 3-dimensional figure where all points on its surface are an equal distance from the center point  |
| <b>Square</b> parallelogram with 4 congruent sides and 4 congruent angles [L14] 32  |
| <b>Square Pyramid</b> 3-dimensional figure with 5 vertices, 8 straight edges, 4 triangular flat faces and 1 square base   |
| Square Root number that, when multiplied by itself, gives the original number [L77] 184   |
| <b>Squared Number</b> number that is multiplied once by itself [L125] <b>298</b>  |
| <b>Statistics</b> term used to describe the collection, organization and analysis of groups of  |





**Vertical Angles** two angles opposite each other. Vertical angles are congruent [L88] **210** 

|                              | <b>Vertices</b> the plural of vertex. See <b>Vertex</b>   |
|------------------------------|---|
|                              | <b>Volume</b> measure of the cubic units required to fill a 3-dimensional figure [L59] <b>140</b>         |
|                              | <b>Volume of a Cylinder</b> area of base (πr <sup>2</sup> ) x height of cylinder, measured in cubic units |
|                              | Volume of a Rectangular Prism length x width x height, in cubic units [L59] 140                           |
| volume of a triangular prisr | Volume of a Triangular Prism area of base (1/2 x base x height) x height of prism, in cubic units         |
|                              | Whole Number any of the numbers 0, 1, 2, 3, etc. that do not have a decimal or fractional part            |
|                              | <b>Width</b> the horizontal dimension of a 2- or 3-dimensional figure [L15] <b>3</b> 4                    |
|                              | X, Y, Z   |
|                              | X-Axis on a coordinate grid, the horizontal axis  |
|                              | <b>X-Coordinate</b> in an ordered pair, the value that is written first [L32] <b>76</b>                   |
|                              | Y-Axis on a coordinate grid, the vertical axis [L45] 76   |
|                              | <b>Y-Coordinate</b> in an ordered pair, the value that is written last [L32] <b>76</b>                    |
|                              | Zero Property of Addition any number added to zero has itself as the sum [L38] 90                         |
|                              | <b>Zero Property of Multiplication</b> any number multiplied by zero has a product of zero                |

#### **Place Value Units**

tens | 4 hundred trillions |→ ten trillions lo trillions |∾ ten billions اح billions lo hundred millions |✓ ten millions l∞ ം l suoillim hundred thousands o ten thousands |→ hundreds | ₪ tenths |9 hundredths |→ hundred billions | thousands l∾ thousandths |∾

### **Math Symbols**

- + add
- subtract
- x multiply
- ÷ divide
- = equal
- ≠ not equal
- ≈ approximately equal
- ~ similar
- ≅ congruent
- < less than
- > greater than
- ≤ less than or equal
- ≥ greater than or equal
- ± plus or minus
- ∞ infinity
- ø null set
- $\pi$  pi = 3.1416
- || parallel
- ⊥ perpendicular

### **Punctuation**

#### % percent

- . decimal point
- , comma (1,000's)
- ( open parenthesis
- ) close parenthesis
- open bracket
- ] close bracket
- o degrees
- ' minutes / feet
- " seconds / inches

#### **Currency**

- \$ dollar
- ¢ cent
- £ pound € euro
- ¥ yen

#### **Integer Number Line**

