SOL 6.1

ratio	**A comparison of two numbers by division**

SOL 6.2

percent	**Percent means "per 100" or how many "out of 100"; percent is another name for hundredths.**
decimal	**A numerical value less than 1. For example, 0.875 is a decimal.**
equivalent	**Expressions that have the same value or that have the same mathematical meaning. For example, ½ and 0.5 are equivalent.**
fraction	**A number representing some part of a whole or part of a set; one number compared to another in the form a/b.**

SOL 6.2(continued)

hundredths	**A numerical value two decimal places to the right of a decimal point. The hundredths place for the numerical value 3.458 would be 5.**
tenths	**A numerical value one decimal place to the right of a decimal point. The tenths place for the numerical value 0.25 would be 2.**
10 x 10 grid	**A grid of 100 units used to represent percents**
product	**The result obtained by multiplying two or more numbers or variables**
whole number	**A number without a decimal or fractional part**
greater than	**The symbol “>” is used to describe a numerical term larger than the one compared to it.**

SOL 6.2(continued)

equal to	**The symbol “=” is used to show that two numerical terms are equal.**
decimal point	**Separates a whole number amount from a number that is less than one**
less than	**The symbol “<” is used to describe a numerical term smaller than the one compared to it**
place value	**The value of a digit as determined by its position in a number; the name of the place or location of a digit in a number**

SOL 6.3

integers	**The set of whole numbers and their opposites. { … -3, -2, -1, 0, 1, 2, 3…}**
opposites	**Two numbers that are the same distance from zero on the number line** **Example: +4 and -4 are opposites**
positive integers	**Numbers that are greater than zero** **Examples: +1, 5, + 20, 100**
negative integers	**Numbers that are less than 0** **Examples: -1, -5, -20, -1,000**
absolute value	**The distance between the number and 0 on a number line.** **The absolute value of -2 is 2** **| -2 | = 2**

SOL 6.4/6.6

addition	**The act or process of combining numerical values, so as to find their sum**
sum	**An amount obtained as a result of adding numbers**
subtraction	**The arithmetic operation of finding the difference between two quantities or numbers**
difference	**An amount obtained as a result of subtracting numbers**
reciprocal	**Any two numbers whose product is 1. Example: ½ and 2 are reciprocals because ½ X 2 = 1**

SOL 6.4/6.6

product	**An amount obtained as a result of multiplying numbers**
division	**The operation of determining how many times one quantity is contained in another; the inverse of multiplication.**
quotient	**An amount obtained as a result of dividing numbers**
numerator	**The expression written above the line in a fraction**
denominator	**The expression written below the line in a fraction that indicates the number of parts into which one whole is divided.**
improper fraction	**A fraction in which the numerator is larger than or equal to the denominator. The value of an improper fraction is greater than or equal to one.**

SOL 6.4/6.6

mixed number	**A numerical value that combines a whole number and a fraction**
simplest form	**A fraction is in simplest form when the greatest common factor of the numerator and denominator is 1.**
simplify	**To reduce the numerator and the denominator in a fraction to the smallest form possible. To divide the numerator and denominator by the GCF is simplifying a fraction.**
LCD	**The least common multiple of the denominators of two or more fractions. Example: 6 is the least common denominator of 2/3 and 1/6.**
estimate	**To make an approximate or rough calculation, often based on rounding**

SOL 6.5

exponent	**The number that tells how many times the base is used as a factor.**
exponential notation	**Numbers written as exponents; the base is the number that is multiplied, and the exponent represents the number of times the base is used as a factor.**
power	**Written as a superscript number, it symbolizes how many times the base number must be multiplied to find the numerical value of the exponent.**
base	**The factor that will be multiplied in an exponent. The power tells how many times the base will be multiplied to find the numerical value of the exponent.**
power of ten	**An exponent composed of the number ten (10) raised to a power. The power tells how many zeroes will be in the standard form of the exponent. For example, 10^3 will have three zeroes in the answer, making it 1,000. If 10^3 were written as a product of its factors, it would read $10\times10\times10=1{,}000$.**
square root	**A number which, when multiplied by itself, produces the given number (e.g., the square root of 49 is 7 since $7 \times 7 = 49$).**

SOL 6.5(continued)

squared	**A number multiplied by itself; symbolized by a superscript 2 written above and to the right of a number. For example, 5 squared (5^2) would be solved by multiplying 5×5=25.**
perfect square	**The number that results from multiplying any whole number by itself (e.g. 36 = 6 × 6).**
cubed	**The product in which a number is a factor three times; 2 cubed is 8 because 2 X 2 X 2 = 8**

SOL 6.7

evaluate	**To find the value of an expression by replacing variables with numbers**
dividend	**The amount you want to divide (inside the division symbol)**
divisor	**The number you divide by (outside of the division symbol)**
quotient	**The answer to a division problem (the number on top of the division symbol)**
Identify the divisor, dividend, and quotient	

SOL 6.8

expression	**A mathematical phrase that contains operations, numbers, and/or variables.**
operation	**The math processes used to solve an expression. (+, -, x, ÷)**
order of operations	**The rules to follow when more than one operation is used in a numerical expression.**
PEMDAS	**Mnemonic used when solving an expression. (please excuse my dear aunt sally)**

SOL 6.9

capacity	**A measure of the ability to receive, hold, or absorb volume; the amount a container can hold**
length	**A measurement of distance**
weight	**Measurement of the pull of gravity on the mass of an object. The _____ of an object changes dependent on the gravitational pull at its location.**
mass	**The amount of matter in an object. The _____ of an object remains the same regardless of its location.**
volume	**The amount of space that a three dimensional figure contains. _____ is expressed in cubic units.**

SOL 6.9(continued)

metric system	**A system of measurement of units based on the number ten with the meter as a unit length, the gram as a unit mass, and the liter as a unit of volume**
meter (m)	**Basic unit of length in the metric measurement system; one _____ is a little longer than a yard.**
centimeter (cm)	**Metric unit of length; 2.5 _____ are about equal to one inch.**
kilometer (km)	**Metric unit of length; one _____ is slightly farther than half a mile.**
liter (l)	**Metric unit of capacity; one _____ is a little more than one quart.**
milliliter (ml)	**Metric unit of capacity; one _____ is about equal to a drop.**

SOL 6.9(continued)

gram (g)	**Metric unit of mass; one _____ is about equal to the mass of one nickel.**
kilogram (kg)	**Metric unit of mass; one _____ is a little more than two pounds.**
U.S. customary system	**System of measurements using inch, foot, yard, mile, fluid ounce, cup, pint, quart, gallon, dry ounce, pound, and ton**
inch (in.)	**Customary unit of length; one ____ is about 2.5 centimeters.**
foot (ft.)	**Customary unit of length; one _____ is about 30 centimeters.**
yard (yd.)	**Customary unit of length; one _____ is a little shorter than one meter.**

SOL 6.9(continued)

mile (mi.)	**Customary unit of length; one _____ is slightly farther than 1.5 kilometers.**
ounce (oz.)	**Customary unit of mass; one _____ is about 28 grams.**
quart (qt.)	**Customary unit of capacity; one _____ is a little less than one liter.**
pound (lb.)	**Customary unit of mass; 2.5lb is about equal to one kilogram.**

SOL 6.10

polygon	**A closed, two-dimensional figure formed by three or more straight sides**
area	**The number of square units needed to cover the surface of a two dimensional figure**
perimeter	**The measure of the distance around a polygon**
length(l)	**The measurement of the extent of an object or shape along its greatest dimension**
width (w)	**The measurement of the extent of an object or shape along its shortest dimension**
base (b)	**The top and bottom faces of a three dimensional object**
diameter	**The distance across a circle through the center**

SOL 6.10(continued)

net	**An arrangement of two-dimensional figures that can be folded to form a polyhedron**
rectangular prism	**A solid figure that has two parallel and congruent bases that are rectangles**
volume	**The number of cubic units needed to fill the space occupied by a solid**
surface area	**The sum of the areas of all the surfaces (faces) of a three-dimensional figure**

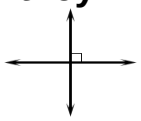
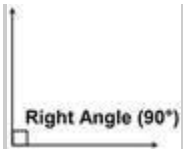
SOL 6.11

coordinate plane	**A plane in which a horizontal number line and a vertical number line intersect**
horizontal number line	**X – axis** **right to left**
vertical number line	**y – axis** **top to bottom**
origin	**The intersection point of the x axis and y axis** **(0,0)**
ordered pair	**A pair of numbers that is used to locate a point in a coordinate plane** **(x,y)**
quadrants	**The four regents created by the two intersecting number lines**

SOL 6.12

corresponding	**The parts of congruent figures that match**
congruent	**Same size and same shape**
noncongruent	**Not having the same size and same shape**
	**Symbol for congruency**

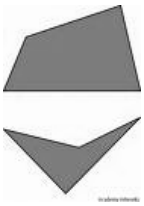
SOL 6.13

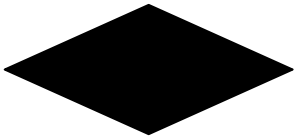
parallel	**Two or more lines, found in the same plane, that remain the same distance apart**
perpendicular	**Lines are perpendicular if they meet to form right angles** 
perpendicular bisector	A line which cuts a line segment into two equal parts at 90°.
right angle	**An angle whose measure is 90°** 
plane figure	**A two dimensional figure**
polygon	**A closed, two dimensional figure formed by three or more straight sides**

SOL 6.13(continued)

quadrilateral	**A polygon with four sides**
360°	**The sum of the measures of angles of a quadrilateral**
parallelogram	**A quadrilateral whose opposite sides are parallel and opposite angles are congruent**
rectangle	**A parallelogram with four right angles**
square	**A rectangle with four congruent sides or a rhombus with four right angles**
rhombus	**A parallelogram with all sides congruent**
trapezoid	**A quadrilateral with one pair of parallel sides.**

SOL 6.13 Activity

What's my name? 	**rectangle**
What's my name? 	**square**
What's my name? 	**quadrilateral**
What's my name? 	**parallelogram**

What's my name? 	**rhombus**
What's my name? 	**trapezoid**

SOL 6.14

line graph	**A graph used to show how a set of data changes over a period of time**
circle graph	**A graph used to compare parts of a whole. The circle represents the whole and is separated into parts of the whole, usually expressed as a percentage**
scale	**The set of all possible values of a given measurement, including the least and greatest numbers in the set, separated by the intervals used**
title	**Used to explain the subject of any graph, plot, table, or chart**
bar graph	**A graph using bars to compare quantities. The height or length of each bar represents a designated number**
data	**Information, often numerical, which is gathered for statistical purposes**
key	**A sample data point used to explain the stem and leaves. It is also used to explain the meaning of symbols of any graph, plot, table, or chart.**

SOL 6.15

data	**Information, often numerical, which is gathered for statistical purposes**
measures of central tendency	**Numbers that are used to describe the center of a set of data; includes the mean, median, and mode**
mean	**The sum of the numbers in a set of data divided by the number of pieces of data (the balance point of the distribution of data)**
median	**The middle number in a set of data when the data are arranged in numerical order. If the data has an even number, the median is the mean of the middle numbers.**
mode	**The number(s) or item(s) that appear most often in a set of data**
range	**The difference between the greatest number and the least number in a set of data**

SOL 6.16

sample space	**The set of all possible outcomes in a probability experiment**
probability	**The chance of an event occurring; expressed using a *ratio.* The numerator describes how many times the event will occur, while the denominator describes the total number of outcomes for the event.**
outcome	**Possible results of a probability event. For example, 4 is an outcome when a number cube is rolled.**
ratio	**A comparison of two numbers by division. Example: The ratio 2 to 3 can be expressed as 2 out of 3, 2:3, or 2/3.**
tree diagram	**A diagram used to show the total number of possible outcomes in a probability experiment**
event	**A specific outcome or type of outcome**

SOL 6.16(continued)

possible outcome	**All the possible events in a probability experiment**
dependent events	**The result of one event affects the result of a second event.**
independent events	**When one event is not affected by a second event.**

SOL 6.17

geometric pattern	**A sequence that is composed of shapes, figures, and diagrams. Geometric patterns may involve shape, size, angles, transformations of shapes, and growth.**
arithmetic sequence	**A set of numbers that occurs in a specific pattern**
triangular number	**A number that can be represented geometrically as a certain number of dots arranged in a triangle, with one dot in the first (top) row and each succeeding lower row having one more dot that the row above it. To find the next triangular number, a new row is added to an existing triangle, and total number of dots counted**
square number	**A number that can be represented geometrically as the number of dots in a square array. Square numbers are perfect squares and are the numbers that result from multiplying any whole number by itself (e.g., 36 = 6 × 6).**
powers of 10	**1, 10, 100, 1,000, 10,000**

SOL 6.18(continued)

consecutive	**Following one after the other in order.**
common ratio	**The ratio used to determine what each number is multiplied by in order to obtain the next number in the geometric sequence**
common difference	**The difference between each succeeding number in order to determine what is added to each previous number to obtain the next number**

SOL 6.19

identity property of addition	**The sum of any number and zero is the number** **6 + 0 = 6**
identity property of multiplication	**The product of any number and 1 is the number.** **5 x 1 = 5**
multiplicative property of zero	**The product of 0 and a number is 0.** **3 x 0 = 0**
inverse property of multiplication	**The product of a number and its inverse (reciprocal) equals 1.** $\frac{1}{5} \cdot 5 = 1$

SOL 6.20

inequality	A mathematical sentence that compares expressions. It contains the symbols <, >,≤, or ≥
<	• Is less than • Is fewer than
>	• Is greater than • Is more than
≤	• Is less than or equal to • Is at most • Is no more than
≥	• Is greater than or equal to • Is at least • Is no less than