Name _____

8th Grade Standards Mastery Tracker									
Expressions and Equations	Level 1	Level 2	Level 3	Level 4	**Expressions and Equations continued**	Level 1	Level 2	Level 3	Level 4
I can use the properties of integer exponents to simplify expressions. (8.EE.A.1)					I can analyze and solve pairs of simultaneous linear equations. (8.EE.C.8)				
I can use square and cube root symbols to represent solutions to equations of the form $x^2=p$ and $x^3=p$, where p is a positive rational number. I can evaluate the square root of a perfect square and the cube root of a perfect cube. I can understand that the square root of 2 is irrational. (8.EE.A.2)					I can explain solutions to a system of two linear equations in two variables as the point of intersection of their graph. I can describe the point of intersection between two lines as the point that satisfies both equations at the same time. (8.EE.C.8a)				
I can write an estimation of a large quantity by expressing it as the product of a single- digit number and a positive power of ten. I can write an estimation of a very small quantity by expressing it as the product of a single-digit number and a negative power of ten. I can compare quantities written as the product of a single-digit number and a power of ten. (8.EE.A.3)					I can solve a system of two equations (linear) in two unknowns algebraically. I can identify cases in which a system of two equations in two unknowns has no solution or an infinite number of solutions. I can solve simple cases of systems of two linear equations in two variables by inspection. (8.EE.C.8b)				
I can solve operations (+,-,x,÷) with two numbers expressed in scientific notation, including problems that include both decimals and scientific notation. I can use scientific notation and choose units of appropriate size for very large or very small measurements. I can interpret scientific notation that has been generated by technology. (8.EE.A.4)					I can solve real-world and mathematical problems leading to two linear equations in two variables. (8.EE.C.8c)				
I can graph proportional relationships, interpreting the unit rate as the slope of the graph. I can use a table, an equation or graph to decide the unit rate of a proportional relationship. I can use the unit rate of a graphed proportional unit rate to compare different proportional relationships. (8.EE.B.5)					**Functions**				
I can use similar triangles to explain why the slope m is the same between two points on a non-vertical line in a coordinate plane. I can explain that an equation in the form of $y=mx$ will represent the graph of a proportional relationship with a slope of m and y-intercept of 0. I can explain that an equation in the form of $y=mx + b$ represents the graph of a linear relationship with a slope of m and a y- intercept of b . (8.EE.B.6)					I can define a function as a rule, where for each input there is exactly one output. I can show the relationship between inputs and outputs of a function by graphing them as ordered pairs on a coordinate grid. (8.F.A.1)				
I can solve linear equations in one variable. (8.EE.C.7)					I can determine the properties of a function given the inputs and outputs in a table. I can compare the properties of two functions that are represented differently (as equations, tables, graphs or given verbally). (8.F.A.2)				
I can simplify a linear equation by using the distributive property and combining like terms. I can give examples of linear equations with one solution, infinitely many solutions or no solutions. (8.EE.C.7a)					I can explain why the equation $y=mx+b$ represents a linear function and then find the slope and y-intercept in relation to the function. I can give examples of relationships and create a table of values that can be defined as a non-linear function. (8.F.A.3)				
I can solve linear equations with rational number coefficients, including equations when solutions require expanding expressions using the distributive property and combining like terms. (8.EE.C.7b)					I can create a function to model a linear relationship between two quantities. I can determine the rate of change and initial value of the function from decryption of the relationship of two (x,y) values, including reading a table or graph. I can find the rate of change and initial value of a linear function in terms of the situation it models and in terms of its graph or a table of values. (8.F.B.4)				

8th Grade Standards Mastery Tracker									
Functions continued	Level 1	Level 2	Level 3	Level 4	Geometry continued	Level 1	Level 2	Level 3	Level 4
I can match the graph of a function to a given situation. I can sketch a graph that exhibits the qualitative features of a function that has been described verbally. (8.F.B.5)					I can explain how transformation can be used to prove that two figures are similar. I can describe a sequence of transformations that either prove or disprove that two figures are similar. (8.G.A.4)				
Geometry					I can informally prove that the sum of any triangle's interior angles will be the same measure as a straight angle (180 degrees). I can informally prove that the sum of any polygon's exterior angles will be 360 degrees. I can estimate the relationships and measurements of the angles created when two parallel lines are cut by a transversal. (8.G.A.5)				
I can verify by measuring and comparing the properties of rotated, reflected or translated geometric figures. (8.G.A.1)					I can use the Pythagorean Theorem to determine if a given triangle is a right triangle. I can use algebraic reasoning to relate a visual model to the Pythagorean Theorem. (8.G.B.6)				
I can verify that corresponding lines and line segments remain the same length. (8.G.A.1a)					I can draw a diagram and use the Pythagorean Theorem to solve real world problems involving right triangles. I can draw a diagram to find right triangles in a three-dimensional figure and use the Pythagorean Theorem to calculate various dimensions. I can apply the Pythagorean Theorem to find an unknown side length of a right triangle. (8.G.B.7)				
I can verify that corresponding angles have the same measure. (8.G.A.1b)					I can apply the Pythagorean Theorem to find the distance between two points in a coordinate system. (8.G.B.8)				
I can verify that corresponding parallel lines remain parallel. (8.G.A.1c)					ALEKS				
I can explain that a two-dimensional figure is congruent to another if the second figure can be made from the first by rotations, reflections and translations. I can describe a sequence of transformations that shows the congruence between two figures. (8.G.A.2)					RtI Tier 3, RtI 8, MS Math 3				
I can describe the changes to the x- and y- coordinates of a figure after either dilation, translation, rotation or reflection. (8.G.A.3)					End of Course Assessment				

Level 1 = 1 pt., Level 2 = 2 pts., Level 3 = 3 pts., Level 4 = 4 pts. Grading Rubric points: A = (310-264 pts.), B = (263-217 pts.), C = (216-170 pts), D = (169-123pts.)