



ILP Math Curriculum Map 2015.16

CL 8

Expressions and Equations	Geometry	Functions
<ul style="list-style-type: none">• Know and apply the properties of integer exponents to generate equivalent numerical expressions. (M.8.EE.1)• Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities. Interpret scientific notation that has been generated by technology. (M.8.EE.4)• Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y=mx$ for a line through the origin and the equation $y=mx+b$ for a line intercepting the vertical axis at b. (M.8.EE.6)• Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x=a$, $a=x$, or $a=b$ results (where a and b are different numbers). (M.8.EE.7a)• Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. (M.8.EE.8b)• Solve real-world and mathematical problems leading to two linear equations in two variables. (M.8.EE.8c)	<ul style="list-style-type: none">• Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions. (M.8.G.7)• Apply the Pythagorean Theorem to find the distance between two points in a coordinate system. (M.8.G.8)	<ul style="list-style-type: none">• Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). (M.8.F.2)