New York State Next Generation Mathematics Learning Standards		
Geometry Crosswalk		
Geometry **Congruence (G.CO)**		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Experiment with transformations in the plane.	**G-CO.1** Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. **G-CO.2** Represent transformations in the plane using, e.g., transparencies and geometry software; describe	**GEO-G.CO.1** Know precise definitions of angle, circle, perpendicular lines, parallel lines, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc **as these exist within a plane**.

New York State Next Generation Mathematics Learning Standards		
Geometry Crosswalk		
Geometry **Congruence (G.CO)**		
Cluster	**NYS P-12 CCLS**	**Next Generation Learning Standard (2017)**
Prove geometric theorems.	**G-CO.9** Prove theorems about lines and angles. *Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly* Note: Theorems include but are not limited to the listed theorems. Example: theorems that involve complementary or supplementary angles.	**GEO-G.CO.9** Prove and **apply** theorems about lines and angles. **Note: Include multi-step proofs and algebraic problems built upon these concepts.** **Examples** of theorems **include but are not limited to**: ¶ Vertical angles are congruent. ¶ If two parallel lines are cut by a transversal, then the alternate interior angles are congruent. ¶ The points on a perpendicular bisector are equidistant from the endpoints of the line segment.
	G-CO.10 Prove theorems about triangles. *Theorems*	

New York State Next Generation Mathematics Learning Standards
Geometry Crosswalk
Geometry **Congruence (G.CO)**

Cluster

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New York State Next Generation Mathematics Learning Standards		
Geometry Crosswalk		
Geometry **Similarity, Right Triangles and Trigonometry (G.SRT)**		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Prove theorems involving similarity.	**G-SRT.4** Prove theorems about triangles. *Theorems include: a line parallel to one side of a triangle divides the*	

New York State Next Generation Mathematics Learning Standards		
Geometry Crosswalk		
Geometry **Similarity, Right Triangles and Trigonometry (G.SRT)**		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Define trigonometric ratios and solve problems involving right triangles.	**G-SRT.6** Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trm0 G[h5/F1 9.96Tf1 539.5 647.14 0.48 refy)	

New York State Next Generation Mathematics Learning Standards
Geometry Crosswalk
Geometry **Circles (G.C)**

New York State Next Generation Mathematics Learning Standards		
Geometry Crosswalk		
Geometry **Expressing Geometric Properties with Equations (G.GPE)**		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Translate between the geometric description and the equation of a conic section.	**G-GPE.1** Derive the equation of a circle of given center and radius using the Pythagorean Theorem;	

New York State Next Generation Mathematics Learning Standards
Geometry Crosswalk
Geometry **Expressing Geometric Properties with Equations (G.GPE)**

New York State Next Generation Mathematics Learning Standards
Geometry Crosswalk
Geometry **Expressing Geometric Properties with Equations (G.GPE)**

New York State Next Generation Mathematics Learning Standards		
Geometry Crosswalk		
Geometry **Geometric Measurement and Dimension (G.GMD)**		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Explain volume formulas and use them to solve problems.	**G-GMD.1** ~~Give~~ an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. ~~*Use dissection arguments,*~~	**GEO-G.GMD.1 Provide** informal arguments for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone.
	G-GMD.3 Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems. ★	**GEO-G.GMD.3** Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems. ★
Visualize relationships between two-dimensional and three-dimensional objects.	**G-GMD.4** Identify the shapes of two-dimenn	

New York State Next Generation Mathematics Learning Standards		
Geometry Crosswalk		
Geometry **Modeling with Geometry (G.MG) ★**		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Apply geometric		