

“Student-Friendly” Standards for CCGPS Analytic Geometry

## Unit 6 | Modeling Geometry

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Standard Code	Mastery Level	Standard
<b>G.GPE.1</b>		Use the Pythagorean Theorem to derive the equation of a circle, given the center and the radius.
		Given an equation of a circle, complete the square to find the center and radius of a circle.
<b>G.GPE.2</b>		Given a focus and directrix, write the equation of the parabola.
		Given a parabola, identify the vertex, focus, directrix, and axis of symmetry, noting that every point on the parabola is the same distance from the focus and the directrix.
<b>G.GPE.4</b>		Use coordinate geometry to prove geometric theorems algebraically. For example, prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$ .