Algebra Strand

Equations and Inequalities

A.A.8 Analyze and solve verbal problems that involve quadratic equations

A.A.11 Solve a system of one linear and one quadratic equation in two variables, where only factoring is required *Note: The quadratic equation should represent a parabola and the solution(s) should be integers.*

A.A.26 Solve algebraic proportions in one variable which result in linear or quadratic equations

A.A.27 Understand and apply the multiplication property of zero to solve quadratic equations with integral coefficients and integral roots

A.A.28 Understand the difference and connection between roots of a quadratic equation and factors of a quadratic expression

A.A.41 Determine the vertex and axis of symmetry of a parabola, given its equation (See A.G.10)

Geometry Strand

Coordinate Geometry

A.G.4 Identify and graph linear, quadratic (parabolic), absolute value, and exponential functions

A.G.8 Find the roots of a parabolic function graphically *Note: quadratic equations with integral solutions*

A.G.9 Solve systems of linear and quadratic equations graphically *Note: Only use systems of linear and quadratic equations that lead to solutions whose coordinates are integers.*

A.G.10 Determine the vertex and axis of symmetry of a parabola, given its graph (See A.A.41) *Note: The vertex will have an ordered pair of integers and the axis of symmetry will have an integral value.*