**Algebra 2**

**1.2 Graph Quadratic Functions in Vertex and Intercept Form**

**Starter(s): Find the vertex and the axis of symmetry for each quadratic function:**

**1.**$f\left(x\right)=x^{2}+6x+9$ **2.** $g\left(x\right)=4x^{2}+7x-2$

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**EXAMPLE 1: Graph a Quadratic in Vertex Form EXAMPLE 2 Use a Quadratic Model in Vertex Form**



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**YOU TRY:**

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**EXAMPLE 3 Graph a Quadratic Function in Intercept Form EXAMPLE 4 Use a Quadratic Function in Intercept Form**

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**YOU TRY:**



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**** **8. WHAT IF? In Example 4, what is the maximum height of the football if the football’s path can be modeled by the function *y* = *–* 0.025*x*(*x –* 50)?**

**EXAMPLE 5: Change from Intercept Form to Standard Form EXAMPLE 6: Change from Vertex Form to Standard Form**



**YOU TRY:**

 

 