## Exit Ticket Day 2

## Using Quadratic Functions in Vertex Form to Describe Projectile Motion



Remember the golf ball graph from yesterday?

1. Write the coordinates of the vertex (horizontal distance, height):
2. Write the coordinates of one other point (horizontal distance, height):
3. What are some predictions you can make about the value of the "a" coefficient in this parabola's equation?
4. Use the vertex and the other point you identified to write an equation in Vertex Form:
5. Answer the following questions about the graph.
a. Identify the $x$-intercept(s) on the graph. Estimate the coordinates. Describe what information the x-intercept(s) give you about the scenario.
b. Identify the $y$-intercept(s) on the graph. Estimate the coordinates. Describe what information the y-intercept(s) give you about the scenario.
c. Identify the vertex on the graph and write its coordinates. Describe what information the vertex gives you about the scenario.
