Name: _____ Class: _____ Date: _____ ID: A

2019-2020 Algebra 2 Ch. 4 Free Response Test

1. Identify the maximum or minimum value and the domain and range of the graph of the function $y = 2(x + 3)^2 - 3$.

2. You live near a bridge that goes over a river. The underneath side of the bridge is an arch that can be modeled with the function $y = -0.000486x^2 + 0.776x$ where x and y are in feet. How high above the river is the bridge (the top of the arch)? How long is the section of bridge above the arch?

What is the equation, in standard form, of a parabola that contains the following points?

3. (–2, 15), (0, 3), (4, 27)