Purpose: In this problem set, you will be utilizing your quadratic function skill set to build quadratic functions with properties determined at random! Beware that not all rolls of the dice will be reasonable.

1. Role one double die.

   (a) Inside: _____ Outside: _____

   (b) Write a quadratic function whose vertex is (inside, outside).

   (c) Roll a single number die: _____

   (d) Write a quadratic function with the same vertex as above whose y-intercept is given by your die roll.

2. Roll a triple die.

    (a) Blue: _____ Red: _____ White: _____

    (b) Write a quadratic function whose zeros are given by the blue and red dice.

    (c) Reflect your parabola across the y-axis and vertically stretch by the number on the white die.