Given a **sorted** array of integers *nums* and integer values *a*, *b* and *c*. Apply a quadratic function of the form f(*x*) = *ax*2 + *bx* + *c* to each element *x* in the array.

The returned array must be in **sorted order**.

Expected time complexity: **O(*n*)**

**Example 1:**

**Input:** nums = [-4,-2,2,4], a = 1, b = 3, c = 5

**Output:** [3,9,15,33]

**Example 2:**

**Input:** nums = [-4,-2,2,4], a = -1, b = 3, c = 5

**Output:** [-23,-5,1,7]