**Roots of Quadratic Equation**

[maths](http://www.practice.geeksforgeeks.org/tag-page.php?tag=maths&isCmp=0)

Given a quadratic equation in the form ax2+ bx + c, find **floor** of roots of it.  For example floor of 5.6 is 5.

**Input:**First line contains an integer, the number of test cases 'T'. Each test case should contain three positive numbers a,b and c.  
  
**Output:** If roots of equations exits, then print the two roots separated by space (Higher valued root should be printed before lower valued). Else if a = 0, then print "Invalid" as equation is not quadratic.  If roots are imaginary, then print "Imaginary"

**Constraints:**  
1<=T<=50  
1<=a<=1000  
1<=b<=1000  
1<=c<=1000

**Example:**  
Input:  
3  
1 -2 1  
1 -7 12  
1 4 8

Output:  
1 1  
4 3  
Imaginary

\*\*For More Examples Use Expected Output\*\*

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=607>

#include <stdio.h>

#include <iostream>

#include <math.h>

#include <algorithm>

#include <cmath>

using namespace std;

int main() {

  int t;

  scanf("%d", &t);

  while(t--) {

     int a,b,c;

     scanf("%d %d %d", &a, &b, &c);

     if(a == 0) {

         printf( "Invalid**\n**"  );

         continue;

     }

     int x =  (b\*b) - (4 \* a \* c);

     if(x < 0) {

        printf(  "Imaginary**\n**" );

        continue;

     }

     int x1 = std::floor(  (-b + std::floor(sqrt(x))) / (2\*a)  );

     int x2 = std::floor(  (-b - std::floor(sqrt(x))) / (2\*a)  );

     if(x1 > x2) {

        printf("%d %d**\n**", x1, x2);

     } else {

        printf("%d %d**\n**", x2, x1);

     }

     //cout << x << endl;

  }

  return 0;

}