//Задача 2 Трикутник

#include "stdafx.h"

#include <iostream>

#include <stdlib.h>

#include <math.h>

#include <conio.h>

using namespace std;

int main()

{

int x;

cout << "Enter X value:" << endl;

cin >> x;

int ax, ay, bx, by, cx, cy;

ax = ay = 0;

bx = x;

by = x - 1;

cx = -x;

cy = x + 1;

int a, b, c;

a = sqrt(pow((cx-bx), 2)+ pow(cy-by, 2));

b = sqrt(pow((cx-ax), 2) + pow(cy-by, 2));

c = sqrt(pow((bx-ax), 2) + pow((bx-ax), 2));

// медиана

float ma;

ma = sqrt((2 \* (pow(b, 2) + 2 \* pow(c, 2))) - pow(a, 2)) / 2;

//висота

float p, h, s;

p = (a + b + c) / 2;

s = sqrt(p\*(p - a)\*(p - b)\*(p - c));

h = (2 \* s) / a;

cout << "Mediana: " << ma << "\n";

cout << "H: " << h << "\n";

system("pause");

}