#include <iostream>

#include <cmath>

#include <iomanip>

using namespace std ;

int main (){

// a , Tinh dien tich theo cong thuc heron

float a , b , c , p ,s , R , r; // R, r lan luot la ban kinh duong tron ngoai tiep va noi tiep tam giac

cout<<" cho ba canh cua tam giac: "<< endl;

cin >> a >> b >> c ;

//Kiem tra ba canh cua tam giac

if ( (a + b>c) && (b + c>a) && (c + a>b))

{

cout <<"Day la ba canh cua tam giac" << endl ;

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

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

cout << fixed << setprecision(4)<< "Dien tich = " << s << endl ;

// b, Tinh ban kinh duong tron ngoai tiep tam giac

R = (a \* b \*c) / (4\*s) ;

cout << fixed << setprecision(4)<< "Ban kinh duong tron ngoai tiep = "<< R << endl ;

// c, Tinh ban kinh duong tron noi tiep tam giac

r = s / p ;

cout << fixed << setprecision(4)<< "Ban kinh duong tron noi tiep = " << r << endl ;

}

else

cout << "Day khong phai la ba canh tam giac" ;

}



