```cpp
1: #include"fun.h"
2: #include<iostream>
3: #include<cmath>
4: #include<cstdlib>
5:
6: using namespace std;
7:
8: int main()
9: {
10:     double a1,a2,b1,b2,c1,c2,x,y,z,s,area,max,min;
11:     cout<<"Point 1's coordinate: "<<endl;
12:     cin>>a1>>a2;
13:     cout<<"Point 2's coordinate: "<<endl;
14:     cin>>b1>>b2;
15:     cout<<"Point 3's coordinate: "<<endl;
16:     cin>>c1>>c2;
17:     cout<<"-----RESULTS------"<<endl;
18:     x=func1(a1,a2,b1,b2);
19:     y=func1(a1,a2,c1,c2);
20:     z=func1(c1,c2,b1,b2);
21:     cout<<"side length: "<<x<<"  "<<y<<"    "<<z<<endl;
22:     area=func2(x,y,z);
23:     cout<<"area: "<<area<<endl;
24:     cout<<"max difference: "<<func3(x,y,z);
25:
26:
27: }
```