

4
5 5 5
1 2 40
10 5 41
7 2 42

Sample Output 0

125
80

Explanation 0

The first box is really low, only **5** feet tall, so it can pass through the tunnel and its volume is **5 x 5 x 5 = 125**.

The second box is sufficiently low, its volume is **1 x 2 x 4 = 80**.

The third box is exactly **41** feet tall, so it cannot pass. The same can be said about the fourth box.

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main(){
3     int n;
4     scanf("%d",&n);
5     for(int i=0;i<n;i++){
6         int length,width,height;
7         scanf("%d %d %d",&length,&width,&
8             height);
9         if(height<41){
10             int volume=length*width*height;
11             printf("%d\n",volume);
12         }
13     }
```

	Input	Expected	Got	
✓	4	125	125	✓
	5 5 5	80	80	
	1 2 40			
	10 5 41			
	7 2 42			

Passed all tests! ✓

Question **2**

Correct

Flag
question

You are given n triangles, specifically, their sides a_i , b_i and c_i . Print them in the same style but sorted by their areas from the smallest one to the largest one. It is guaranteed that all the areas are different.

The best way to calculate a volume of the triangle with sides a , b and c is Heron's formula:

$$S = \sqrt{p * (p - a) * (p - b) * (p - c)} \text{ where } p = (a + b + c) / 2.$$

Sample Input 0

3
7 24 25
5 12 13
3 4 5

Sample Output 0

3 4 5
5 12 13
7 24 25

Explanation 0

The square of the first triangle is **84**. The square of the second triangle is **30**. The square of the third triangle is **6**. So the sorted order is the reverse one.

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 #include<math.h>
3 #include<stdlib.h>
4 typedef struct{
5     double area;
6     int a,b,c;
7 }Triangle;
8 double calculate_area(int a,int b,int c){
9     double p=(a+b+c)/2.0;
10    return sqrt(p*(p-a)*(p-b)*(p-c));
11 }
12 int compare(const void*x,const void*y){
13     Triangle*t1=(Triangle*)x;
14     Triangle*t2=(Triangle*)y;
15     if(t1->area<t2->area)return-1;
16     if(t1->area>t2->area)return 1;
17     return 0;
18 }
19 int main(){
20     int n;
21     scanf("%d",&n);
22     Triangle triangles[n];
23     for(int i=0;i<n;i++){
24         int a,b,c;
25         scanf("%d %d %d",&a,&b,&c);
26         triangles[i].a=a;
27         triangles[i].b=b;
28         triangles[i].c=c;
29         triangles[i].area=calculate_area(
30     )
31     qsort(triangles,n,sizeof(Triangle),co
32     for(int i=0;i<n;i++){
33         printf("%d %d %d\n",triangles[i].
34     )
35     return 0;
36 }
```

	Input	Expected	Got	
✓	3 7 24 25 5 12 13 3 4 5	3 4 5 5 12 13 7 24 25	3 4 5 5 12 13 7 24 25	✓

Passed all tests! ✓

Finish review