

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
9 double calculate_area(int a,int b,int c){
10     double p=(a+b+c)/2.0;
11     return sqrt(p*(p-a)*(p-b)*(p-c));
12 }
13
14 int compare(const void*a,const void*y){
15     triangle *t1=(triangle *)a;
16     triangle *t2=(triangle *)y;
17     if (t1->area < t2->area) return -1;
18     if (t1->area > t2->area) return 1;
19     return 0;
20 }
21 int main(){
22     int n;
23     scanf("%d",&n);
24     triangle triangles[n];
25
26     for(int i=0;i<n;i++){
27         int a,b,c;
28         scanf("%d %d %d",&a,&b,&c);
29
30         triangles[i].a = a;
31         triangles[i].b = b;
32         triangles[i].c = c;
33         triangles[i].area = calculate_area(a,b,c);
34     }
35
36
37     qsort(triangles, n, sizeof(triangle),compare);
38
39     for(int i=0;i<n;i++){
40         printf("%d %d %d\n",triangles[i].a, triangles[i].b, triangles[i].c);
41     }
42     return 0;
43 }

```

/

	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! ✓

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 **$5 \times 5 \times 5 = 125$** .

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

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 {
4     int n;
5     scanf("%d",&n);
6     for(int i=0;i<n;i++)
7     {
8         int length,width,height;
9         scanf("%d %d %d",&length,&width,&height);
10        if(height<41)
11        {
12            int volume=length*width*height;
13            printf("%d\n",volume);
14        }
15    }
16 }
17
```

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

Passed all tests! ✓