

Problem A: Heizlüfterparty

Nothing beats a warm cat basket. Especially if the country you are staying in has very cold nights, as for instance this year, when the ICPC (*Incredibly Collegiate Purring Competition*) is carried out in such a country. The three members of team FAUCat decide that the best way to provide a warm cat basket is to have a heater-party, or as they call it “Heizlüfterparty”. The hotel they are staying at already provides a heater which radiates warmth equally in all directions. The only restriction is that the heater cannot be moved away from the wall it has been assigned to by the hotel. Other than that, it can be moved freely along the wall.

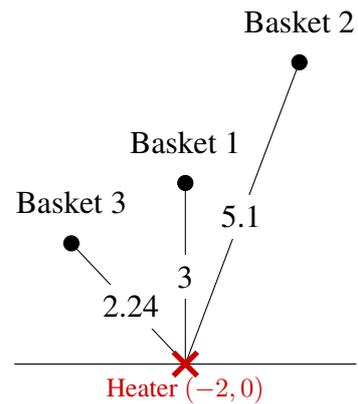


Figure A.1: Sample Output 2

The first course of action is to fully crank up the heat. Still the heater doesn't fully satisfy everyone's desire for warmth, so the team decides to move the heater around. Some attempts later, the members start to question whether it is possible to place the heater in a position that satisfies everyone. After all, every cat has different preferences. While each of the members may have their own ideas about how far from their basket the heater can be to still be warm enough, they all agree that having the heater closer to their basket is never wrong and always appreciated. After all, the night is supposed to be HOT HOT HOT!

Input

The input consists of three lines containing three integers x , y and r ($-1000 \leq x \leq 1000$, $0 < y < r \leq 1000$) each. x and y describe the position of a cat basket and r describes the maximum distance the heater may have from this very basket. Every basket has a unique position.

The wall the heater must never be moved away from, is always described by the function $f(x) = 0$ (the x-axis).

Output

Output `yes` if the heater can be placed so it is at most the described distance away from each cat basket. Otherwise `no`. You can safely assume that if the heater can be placed, then there is a position on the x-axis such that the heater can be placed on all positions within a distance of 10^{-6} .

Sample Input 1

```
0 1 2
1 1 2
2 1 2
```

Sample Output 1

```
yes
```

Sample Input 2

```
-2 3 5
-1 5 6
-3 2 4
```

Sample Output 2

```
yes
```

Sample Input 3

```
0 1 2  
1 1 2  
100 1 2
```

Sample Output 3

```
no
```