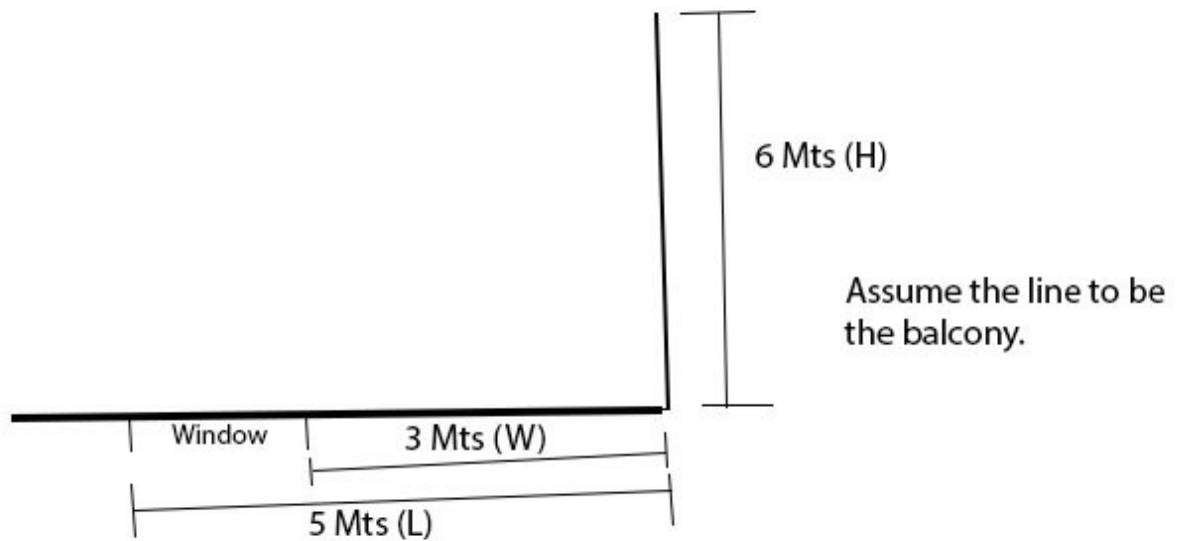


# Sight Logic



Flynn Ryder is a lazy fellow studying in a reputed college which teaches him Computer Science. He has a crush over a girl in the class next to his class. Everytime when she crosses his class, he never misses to get a glimpse of her through the window in his class. He always sits near the window so that he can never miss the opportunity to see her. Suddenly, he thought of calculating the ideal place where he can be seated so that he can watch her exactly till the end of the balcony, where she crosses in his view area, if possible. He has constraints over the distance upto which he can see.

--> Maximum angle he can turn his head is 60 degrees, beyond that, teacher might catch him.

--> The balcony outside his classroom has a "L" shaped configuration as shown.

--> Window in his classroom has a length of 2 meters and he can sit anywhere in that 2 meters gap near the window.

--> He can watch her through the window, after she crosses him in the segment of the balcony where window is present.

--> He can't see her, while she's walking parallel to his class, where there is no window.

--> Assume, he can watch her right from the intersection of the balconies, while she is walking perpendicular to his class.

You, being Flynn Ryder's Best Friend, Help him out to create a program which does the work for Flynn Ryder.

## Input

First get the number of testcases "t" which is to be processed. Then get three values L,H,W.

L - Length of the balcony where Flynn Ryder's class is present.

H - Length of the other arm of the balcony.

W - Distance from the intersection point of the balconies to the starting point of the window through

which Flynn Ryder is going to see his crush. Window can be anywhere on the side "L" with length of 2 mts.

Range:

$0 < t < 1000$

$0 < L, H < 10^{19}$

## Output

The Output contains of two values. First one is the ideal distance where Flynn Ryder should be seated to have the glimpse of her right till the end of the balcony, if he can. Second one is the distance, in which Flynn Ryder can see her crossing the balcony, sitting from the ideal position. Outputs must be accurate upto 2 decimal points. Print the values on a new line.

## Example

**Input:**

2

5 6 3

5 5 3

**Output:**

3.46 6.46

3.00 5.00