

Area of a triangle

Find the area of a triangle with all its three sides given as a,b and c.

Input:

The first line of input contains an integer T denoting the number of test cases. Each test case contains three space-separated integers a,b and c.

Output:

Output the area of the triangle answer with a precision of 6 decimal places. The area is to be printed as 0.000000 if the triangle does not exist.

Constraints:

$1 \leq t \leq 200$

$1 \leq a, b, c \leq 100$

Example:

Input:

2

2 2 3

3 4 5

Output:

1.984313

6.000000