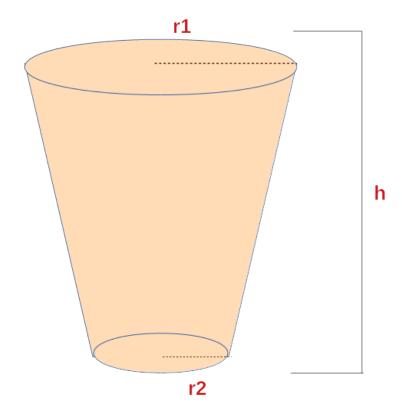# Can you measure water?

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

Look at this glass:

From this we get $r1$, $r2$ and h. Can you measure - with how much water it can be filled?

[Note: If you use pi, use 3.14159]

Input

You'll be given $r1$, $r2$, and h such that $(1 \leq r2 \leq r1 \leq 100)$ and $(1 \leq h \leq 100)$

Output

You have to print the result till 10^{-3}.

Scoring

For 20 points: $r1=r2$

FOr 80 points: Main Constraints

Examples

standard input	standard output
5 3 4	205.251
5 2 3	122.522
10 5 7	1282.816