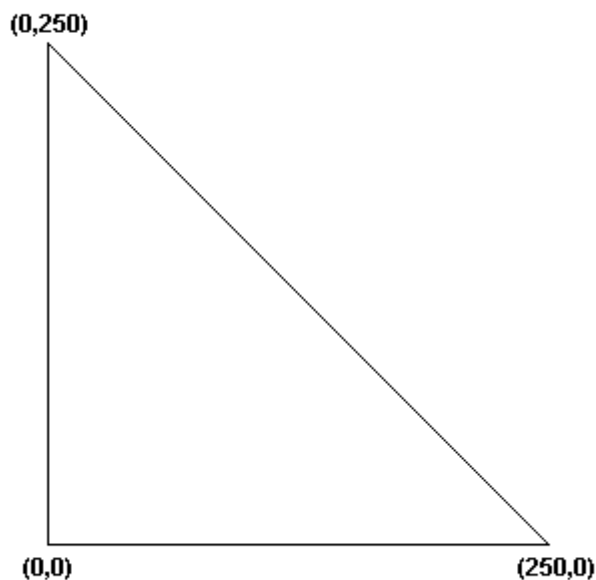


Mirko and Slavko have built a grand new pool in front of their weekend getaway.
The pool is an isosceles right triangle, with legs of length 250.



Everything was perfect, girls were coming, the DJ was coming, and the parties were wild.
But, a problem arose when they started serving food at the parties. Mirko is vegetarian, while Slavko thinks a party without sausages is no party at all. Therefore they had to divide the pool into two parts.
The pool is placed into a coordinate system (as in the figure above) and divided into two parts of **equal area** by a line segment with **both endpoints on the edges** of the pool.
Write a program that, given one endpoint of the dividing line segment, calculates the coordinates of the other endpoint.

INPUT

The first line contains two integers, the coordinates of one endpoint of the dividing line segment.
That point will be on one of the edges of the pool.

OUTPUT

Output the coordinates of the other endpoint, rounded to two decimal digits.

EXAMPLES

input 0 0	input 230 20	input 0 40
output 125.00 125.00	output 0.00 114.13	output 148.81 101.19