

## Problem : Optimum Cost Calculator

A town A is located on a river. We have to send cargo to town B which is located 'a' kilometers downstream and 'd' kilometers from the river. Government wants to construct a sea link between B and the river such that the cost of transportation of goods from A to B is the cheapest. The transport cost of a unit of cargo per kilometer by waterway is half the cost incurred by taking the highway.

Your task is to help the government find a point in the river from which to construct a highway to town B so that the government's objective of reducing transportation cost is achieved. More specifically, calculate the distance from town A where the highway has to be constructed and the length of the highway to be constructed.

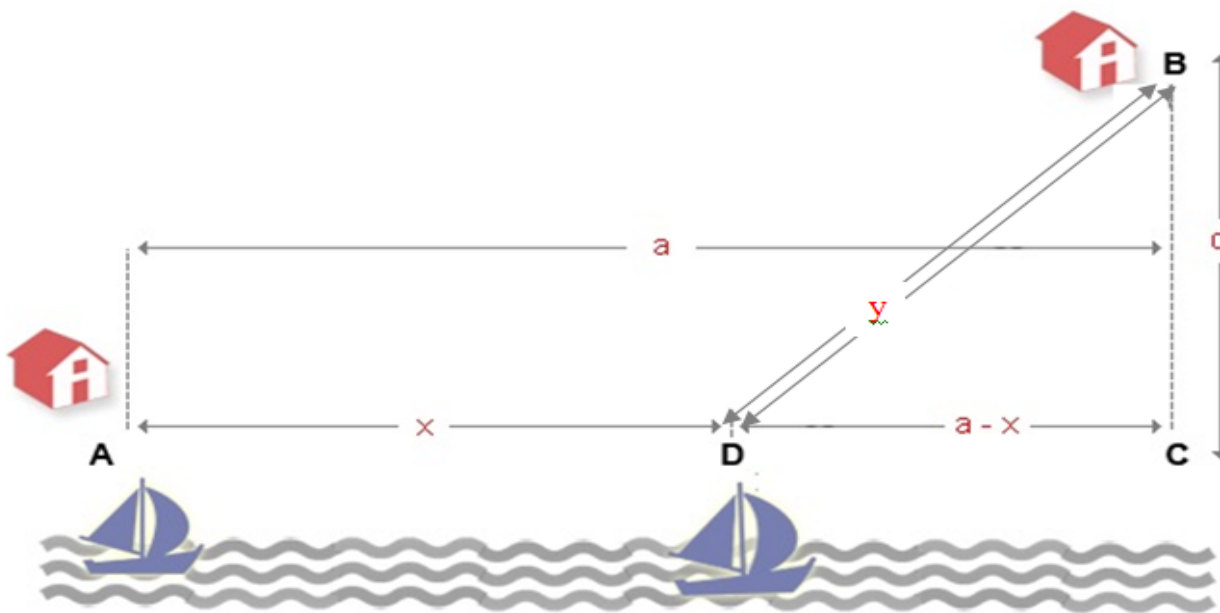


Fig:Sea link Planning

### Input Format:

First line contains the distance between A and C along the river denoted 'a'  
Second line contains the distance between C and B along the road denoted by 'd'

### Output Format:

Print the distance of the point in the river denoted by D from Town A.  
Print the length of the highway that needs to be built from D to B.

OR

Print "Invalid Input", if any constraint is violated

### Constraints:

$$0 < a \leq (57 * d)$$

$$0 < d \leq (1.7 * a)$$

Calculations and printing of output should be done upto 11-digit precision

### Sample Input and Output

SNo.	Input	Output
1	50 10	X= 44.22649730810 Y= 11.54700538379
2	40 10	X= 34.22649730810 Y= 11.54700538379
3	172 3	Invalid Input