

Time Left

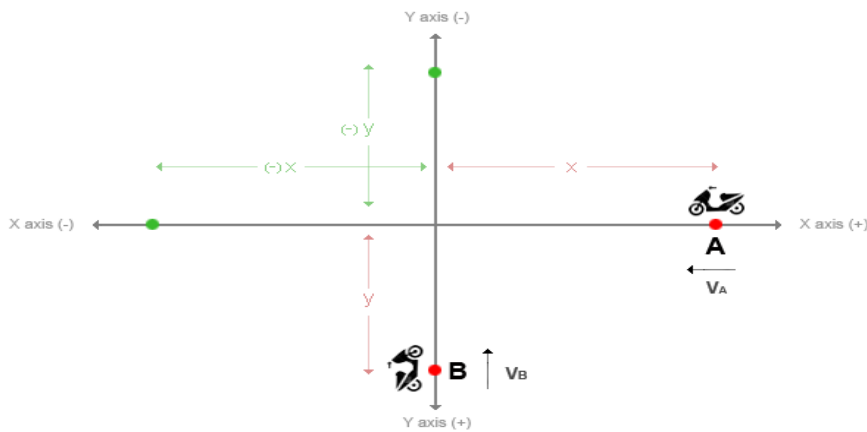
<C*deVita/>
 the TCS Coding Contest

04 10 26
 hr min sec
Coding Arena

A B C D E F

Rules & Regulations**Launch Code Editor****Problem : Minimum Distance**

Two riders A and B are travelling on a highway towards each other on two roads that intersect at right angle at speeds V_A meters/second and V_B meters/second. A is at a distance of ' x ' meters and B is at a distance of ' y ' meters from the intersection. Calculate the minimum distance between these two riders that is possible.

**Fig: Approaching Intersection****Input Format:**

First line contains the distance of Rider A from intersection denoted by x
 Second line contains the distance of Rider B from intersection denoted by y
 Third line contains the Velocity of Rider A denoted by V_A
 Fourth line contains the Velocity of Rider B denoted by V_B

Output Format:

Print the minimum distance between these two riders, if minimum distance is non-zero. If minimum distance is zero, print it as 0.0

Constraints: $x > 0$ $y > 0$ $V_A > 0$ $V_B > 0$

Calculation and printing of output should be done upto 11-precision

Sample Input and Output

| SNo. | Input | Output |
|------|------------------|--------|
| 1 | 100 100 10 | 0.0 |

| | | |
|---|------------------------|----------------|
| | 10 | |
| 2 | 500 300 20 14 | 41.18252056395 |
| 3 | 100 100 30 40 | 22.36067977500 |
| 5 | 0 50 -20 30 | Invalid Input |

Note:

Please do not use package and namespace in your code. For object oriented languages your code should be written in one class.

Note:

Participants submitting solutions in C language should not use functions from <conio.h> / <process.h> as these files do not exist in gcc

Note:

For C and C++, return type of main() function should be int.

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Submit Answer

☐ I, **ABHISHEK SARKAR** confirm that the answer submitted is my own.

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