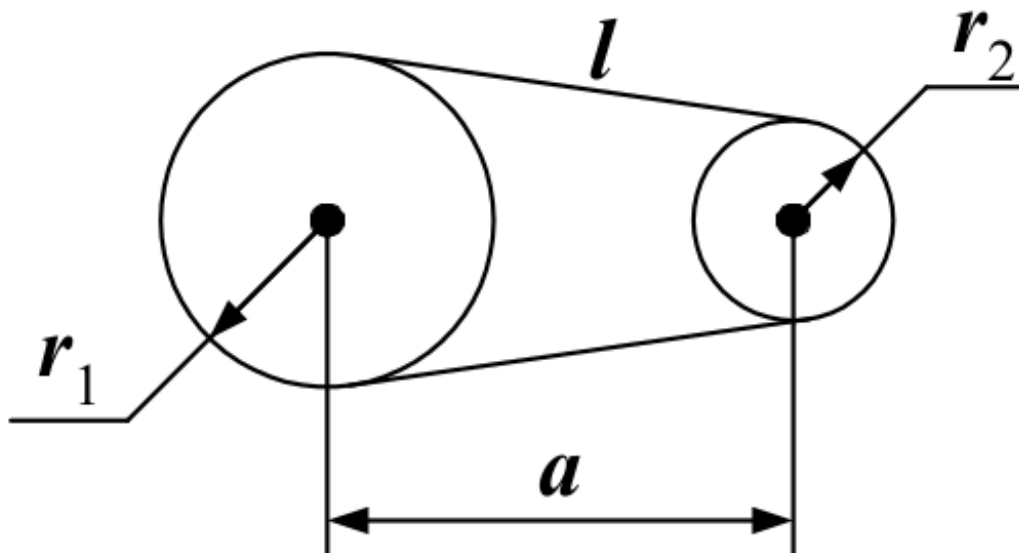


BELT DRIVE

A belt drive consists of two pulleys of different radius (r_1 and r_2) connected by a belt of length l . The industry manufactures belts of different standard lengths, so the engineers often face a task of calculating the distance between the pulley centers given their radii and the belt length. There are several simple approximate methods to do this, which are precise enough for rough estimations. However, some engineering tasks require more precise data.



Your task is to write a program that will calculate the distance a between the centers of the pulleys given their radii r_1 and r_2 , and the length l of the belt.

Limitations

$$1 \leq r_1, r_2 \leq 1,000; 2\pi(r_1 + r_2) \leq l \leq 10,000.$$

Input

The first line contains 3 space-delimited real numbers precise to four decimal places: r_1 , r_2 , l . Trailing zeros following the decimal point may be omitted.

Output

The output file should contain a single real number, the center-to-center distance a . The answer must be precise to four decimal places.

Example

Nº	stdin	stdout
1	1.0 2.0 20.0	5.191
2	1.0 2.0 18.85	4.6036