

Problem

Read https://www.tutorialspoint.com/c_standard_library/math_h.htm

Take pi as 3.14159

Consider the following equation,

$$\sin(x) + \tan(x) = k$$

k is a decimal number (positive or negative) with maximum three decimal places.

Solve the equation for x in radians within the range (-pi,pi) and print the answer rounded to three decimal places.

Note:

1. You will have to use the basic functions in the math library

sin()

tan()

pow()

fabs() = The absolute value of a number (the positive value even if the number is positive or negative)

2. When compiling the source with the math library, type the following in the terminal

gcc fileName.c -lm

Sample input #1

0

Sample output #1

0.000

Explanation

$$\sin(0.00) + \tan(0.00) = 0$$

Sample input #1

-2.000

Sample output #1

-0.886

Explanation

$$\sin(-0.886) + \tan(0.886) = -2.000$$