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The Virtual Learning Environment for Computer Programming

Polynomial evaluation (1)

P96767_en

Write a program that reads a number x and a polynomial $p(z) = c_0 z^0 + c_1 z^1 + \cdots + c_n z^n$, and computes p(x).

Input

Input consists of a real number x followed by the description of the polynomial p(z): the real coefficients c_0, c_1, \ldots, c_n in this order. (The first sample input/output corresponds to the evaluation of $p(z) = 3 + 4z + 5z^2$ at x = 2.)

Output

Print p(x) with 4 digits after the decimal point.

2 3 4 5

Sample output 1

31.0000

Sample input 2

3 0 0 10

Sample output 2

90.0000

Sample input 3

-2.5 1 -2 0 5.4

Sample output 3

-78.3750

Problem information

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