

Maximizing the equation

Given 3 sequences of positive numbers A,B and C. Your mission is to maximize this equation:

$$Z = A[i] / (B[j] * C[k]).$$

In other words, you have to choose any numbers from the given sequences in order to maximize Z.

Input:

First line contains a positive integer T which is the number of test cases. Each test case has the following format:

N

A[0] A[1] A[2] A[N-1]

M

B[0] B[1] B[2] B[M-1]

P

C[0] C[1] C[2] C[P-1]

Constraints:

$$1 \leq T \leq 100$$

$$1 \leq N, M, P \leq 10000$$

$$1 \leq A[i], B[i], C[i] \leq 1000$$

Output:

Print T lines, one for each test case that contains the maximum Z rounded to 2 decimal places.

Sample Input:

2

3

1 2 3

4

5 6 7 8

3

10 2 6

1

5

1

4

2

1 2

Sample Output:

0.30

1.25