

Pizza

2022/2023 SEASON – SECOND ROUND



You want to order n pizzas from the famous *Cube's* chain. Their prices are x_1, x_2, \dots, x_n BGN.

Cube's offers 2 discounts:

- (1) "Buy 2 pizzas and pay only 60% of the original price of the cheaper one"
- (2) "Buy 3 pizzas and pay only 5 BGN for the cheapest"

Each pizza can be purchased individually or a part of one discount. You want to combine the discounts in such a way that you pay the least amount of money in total.

Input

The first line of the file **pizza.in** contains the number n and the second line contains n numbers - x_1, x_2, \dots, x_n

Output

Print the minimal possible cost in the file **pizza.out**. The answer will be considered as correct if the absolute or relative error is $\leq 10^{-9}$

Constraints

$$1 \leq n \leq 100\,000$$

$$5 \leq x_i \leq 50, x_i \text{ has at most 1 decimal digit}$$

Time limit: 0.8 sec.

Memory limit: 256 MB.

Sample test

Input (pizza.in)	Output (pizza.out)
5	42.8
10.5 10.5 10.5 10.5 10.5	