Minimum sum of factors

Given a number, find minimum sum of its factors.

Input:

First line consists of T, test cases. Only line of every test case consists of an integer N

Output:

Single line output, print the Sum of factors.

Constraints:

1<=T<=100000

1<=N<=100000

Example:

Input:

2

11

12

Output:

12

7

Explanation:

Following are different ways to factorize 12 and sum of factors in different ways.

$$12 = 12 * 1 = 12 + 1 = 13$$

$$12 = 2 * 6 = 2 + 6 = 8$$

$$12 = 3 * 4 = 3 + 4 = 7$$

$$12 = 2 * 2 * 3 = 2 + 2 + 3 = 7$$

Therefore minimum sum is 7