

# Function $\sigma$

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[English version](#)

For given integer  $n$  print  $\sigma(n)$ .

## Input

The first line of the standard input contains one integer  $t$  ( $t < 200$ ) which is the number of test cases.

In each of the next  $t$  lines there is one integer  $n$  ( $0 < n \leq 10^9$ ).

## Output

For each test, print  $\sigma(n)$ .

## Example

**Input:**

3  
1  
6  
8

**Output:**

1  
12  
15