1001. Reverse Root

Time limit: 2.0 second Memory limit: 64 MB

The problem is so easy, that the authors were lazy to write a statement for it!

Input

The input stream contains a set of integer numbers A_i ($0 \le A_i \le 10^{18}$). The numbers are separated by any number of spaces and line breaks. A size of the input stream does not exceed 256 KB.

Output

For each number A_i from the last one till the first one you should output its square root. Each square root should be printed in a separate line with at least four digits after decimal point.

Sample

input	output
1427 0 876652098643267843 5276538	2297.0716 936297014.1164 0.0000 37.7757

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