Problem J. Jokers

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Input file: input.txt

Output file: output.txt

Time limit: 1 sec

Memory limit: 256 Mb

Statement

Once upon a time Marfa Gennadievna bought a pack of 54 playing cards containing two jokers. She put cards face down and chose N cards of them randomly (with uniform probability distribution).

Your program must calculate the probability that there will be at least one joker among chosen cards.

Input file format

Input file contains a single integer N.

Output file format

Output file must contain a single real number — required probability with at least 6 correct digits after decimal point.

Constraints

$2 \leq N \leq 54$

Sample tests

No.	Input file (`input.txt`)	Output file (`output.txt`)
1	2	0.073375
2	10	0.338924

0.019s 0.003s 7