SAC '22 Code Challenge 3 P2 - Unicycle License

Time limit: 1.0s **Memory limit:** 256M

After having his driver's license revoked for speeding, Zain is forced to bike to school on his electric unicycle.

On his unicycle, his speed in metres can be modelled by the function $S(t) = 12t^2 - 5t + 1$, where t is the time in seconds that have passed (and must be positive).

Since Zain is a model citizen (and does not want his electric unicycle license revoked as well), he will stop when he reaches a speed above M.

Because Zain does not trust himself to stop, he entrusts you with telling him the exact time to stop within an absolute error of 10^{-6}.

Can you save Zain's license?

Input Specification

The first line will contain M $(1 \leq M \leq 10^9)$, the speed where Zain dismounts his unicycle.

Output Specification

Output the time Zain should dismount his unicycle in seconds.

Note: A solution will be accepted with up to an error of 10^{-6}.

Sample Input

```
15
```

Sample Output

```
1.308365
```