

## Problem F Royale Clash

Time limit: 3 seconds

Memory limit: 1024 megabytes

### Problem Description

Mugi has recently been playing a card game called Royale Clash, and his favorite card is called Mega Knight. However, this card has a natural counter called P.E.K.K.A. Every time Mugi uses Mega Knight, he gets defeated by the opponent's P.E.K.K.A. To overcome this challenge, Mugi plans to level up his Mega Knight so that it can defeat the enemy P.E.K.K.A on its own while surviving the battle.

The battle logic between Mega Knight and P.E.K.K.A is simple: they start attacking each other simultaneously at the same attack frequency until one side (or both) reaches zero health.

It is known that at level 1, Mega Knight has 30 health and 10 attack power, while P.E.K.K.A has 50 health and 25 attack power. Fortunately, with each level up, Mega Knight's health and attack are multiplied by 1.3, whereas P.E.K.K.A's health and attack are multiplied by only 1.25.

Your task is to write a program to help Mugi calculate how many levels higher his Mega Knight needs to be compared to the opponent in order to defeat the enemy P.E.K.K.A.

### Input Format

Multiple lines of input, each line contains a single positive integer  $L$  ( $1 \leq L \leq 50$ ), representing the level of the opponent's P.E.K.K.A. Input ends at end-of-file (EOF).

### Output Format

For each input line, output a single integer representing how many levels higher Mugi's Mega Knight needs to be compared to the opponent's P.E.K.K.A in order to defeat it while surviving. In other words, if Mega Knight and P.E.K.K.A would die at the same time, Mega Knight must level up further to survive. If Mega Knight can win without being at a higher level, or even at a lower level, just output 0 instead. Each result should be printed on its own line.

### Technical Specification

- $1 \leq L \leq 50$
- Please use double for all calculations of the status of Mega Knight and P.E.K.K.A. (Do not use float!).

### Sample Input 1

1
5

### Sample Output 1

4
3

25	0
----	---