

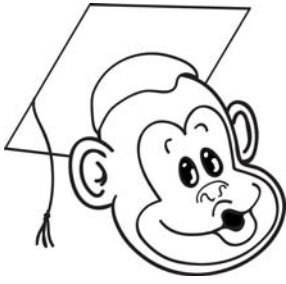


This brainteaser was written by Derrick Niederman.

Perform the following steps:

- Pick a positive integer, any positive integer at all.
- Write out the number in English.
- Count the number of letters in that word. The number of letters is now your new number.
- Write out your new number in English, and count the number of letters.
- Repeat until it feels ... um, well ... *repetitive*.

When you can't go any further, what number are you at? And how can you be sure that you will always end at this number, no matter what number you chose at the beginning?



Solution: Four.

When written out in English, the number four has four letters. Consequently, you'll keep going in an infinite loop.

But why do you get to four in the first place? The key to the whole puzzle is that for virtually every number whatsoever, the number of letters is smaller than the number itself. The only exceptions are ONE, TWO, THREE, and FOUR. So no matter which number you start with, you'll eventually get to one of the four numbers in caps above. And what happens if you do? Follow the patterns below:

ONE → THREE → FIVE → FOUR

TWO → THREE → FIVE → FOUR

Note that you'd never get to ONE or TWO unless you chose that number initially.

THREE → FIVE → FOUR

FOUR → FOUR

We're done.