

1 Pony Express

After getting his first internship at USPS, Renegade came into office from lunch break one day to find out that the postal carriers decided to have a water balloon fight in every server room breaking each rack. In a scramble to keep their jobs, the devs worked to rewrite the back-end. Renegade was told to ensure the validity of 22-digit tracking numbers. Unfortunately, he sprained his foot during his fountain toss and needs your help implementing the validation.

The indices of the digits in the code are 1-based, with 22 being the left-most digit and 1 being the right-most. The check-sum digit is in position 1. The check digit must follow a general rule to be valid. The check digit is the smallest number which, when added to sum of the odd-digits (not-including the check-digit) times three plus the sum of even-digits, gives a number that is a multiple of 10. Note that an ID only contains positive numbers.

1.1 Input

The input consists of an arbitrary number of lines, each containing a 22-Digit tracking number.

1.2 Output

Each line of the output should contain the validity of a tracking number in the form of true/false.

1.3 Sample Input/Output

Sample Input	Sample Output
6780726047469215599210	true
2302318695420634188792	false
...	...
4638852541045574473209	true