


N으로 표현

# Index	42895
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References

<https://school.programmers.co.kr/learn/courses/30/lessons/42895>

References

1. Dynamic Programming

1. Dynamic Programming

```
import math

def solution(N, number):
    dp = [[], [N]]
    count = 1
    if number in dp[count]:
        return 1

    dp.append([N * 11, N + N, N // N, N * N])
    count += 1
    if number in dp[count]:
        return count

    while count < 8:
        count += 1
        if number == N * ((10 ** count) // 9):
            return count
        cur = [N * ((10 ** count) // 9)]
        for i in range(1, math.ceil(count / 2) + 1):
            for a in dp[i]:
                for b in dp[count - i]:
```

```
        if number == a + b or number == abs(a - b) or number == a * b:
            return count
        if a != 0 and number == b // a:
            return count
        if b != 0 and number == a // b:
            return count
        cur.append(a + b)
        cur.append(abs(a - b))
        cur.append(a * b)
        if a != 0 and b // a != 0:
            cur.append(b // a)
        elif b != 0 and a // b != 0:
            cur.append(a // b)
    dp.append(cur)

return -1
```