

## The other mathematical formulas of the prime numbers

Xu Feng

1)  $\frac{4 \times 10^n + 1}{7}$ , when  $n = 5 + 6k$ ,  $k = 0, 1, 2, 3, 4, \dots, \infty$ , its results are the prime numbers.

but when  $k = 3, 4, 5, \dots, \infty$ , it has the repeating numbers 571428.

2)  $\frac{4 \times 10^n + 3}{7}$ , when  $n = 6k$ ,  $k = 1, 2, 3, 4, \dots, \infty$ , its results are the prime numbers,

but when  $k = 3, 4, 5, 6, \dots, \infty$ , it has the repeating numbers 571428 too.

3)  $\frac{4 \times 10^n + 7}{11}$ , when  $n = 2k$ ,  $k = 0, 1, 2, 3, 4, \dots, \infty$ , its results are the prime numbers,

but when  $k = 3, 4, 5, 6, \dots, \infty$ , it has the repeating numbers 36.