

1. What are all the prime numbers up to 100?
2. Is $n^2 + n + 41$ a prime number for every n ?
3. Is $2^n - 1$ always a prime number?
4. Is $(2 \times 5 \times 7 \times 11 \times 13) + 1$ a prime?
5. How many prime numbers are there?
6. Suppose A and B are natural number. Let a be remainder of A divided by n and let b be the remainder of B divided by n . Show that the remainder of $A \times B$ divided by n is equal to the remainder of $a \times b$ divided by n .
7. Is $26 + 31^5$ divisible by 29?
8. Find the remainder of 9^{2000} divided by 80.
9. Show that if n is divisible by 3, then the sum of digits of n is also divisible by 3.
10. Come up divisibility rules for 5, 9 and 11.