1990 HG4

求 21989 + 1 被 3 除所得的餘數。

Find the remainder when $2^{1989} + 1$ is divided by 3.

1991 FI3.1

若6位數168a26可被3整除,求a之最大可能值。

If the 6-digit number 168a26 is divisible by 3, find the greatest possible value of a.

2001 HG6

如果十位數 2468m2468m 可被 3 整除, 求 m 的最大值。

If a ten-digit number 2468m2468m is divisible by 3, find the maximum value of m.

2013 FI1.3

若 c 為 $3^{100} + 4^{50} + 5^{25}$ 除以 3 的餘數, 求 c 的數值。

If c is the remainder of $3^{100} + 4^{50} + 5^{25}$ divided by 3, find the value of c.

2015 FI2.3

若 γ 為 $(3^{100} + 5^{50} + 7^{25}) \div 3$ 的餘數, 求 γ 的值。

If γ is the remainder of $(3^{100} + 5^{50} + 7^{25}) \div 3$, determine the value of γ .

2018 HI13

一個四位數可以透過把它的所有數字加起來,變成另一個數。例如:1234 可以變成 10,因為 1+2+3+4=10。究竟從 1998 至 4998(包括此兩個數)有多少個四位數,經上述變換後不可以被 3 整除?

A 4-digit number can be transformed into another number by adding its digits. For example, 1234 is transformed into 10 as 1 + 2 + 3 + 4 = 10. How many transformed numbers from 1998 to 4998 inclusive are **NOT** divisible by 3?

Answers

1990 HG4	1991 FI3.1	2001 HG6	2013 FI1.3	2015 FI2.3
0	7	7	0	2
2018 HI13 2000				_