1992 HG5

求 10^{1991} 除以 7 的餘數。

Find the remainder when 10^{1991} is divided by 7 .

2000 FI2.3

當 1999^{81} 被 7 除時，餘數為 R。求 R 的值。

When 1999^{81} is divided by 7, the remainder is R. Find the value of R .

2008 FG2.2

若 $1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 6^6$ 被 7 除後的餘數是 R，求 R 的值。

If R is the remainder of $1^6 + 2^6 +3^6 +4^6 +5^6 +6^6$ divided by 7, find the value of R.

2013 FI1.2

已知 111111 能被 7 整除。若 b 為 $\underbrace{111111\ldots111111}_{100個}$ 除以 7 的餘數，求 b 的數值。

Given that 7 divides 111111. If b is the remainder when $\underbrace{111111\ldots111111}_{100-times}$ is divided by 7, find the value of b .

2015 FI2.2

若 β 為 $\underbrace{111\cdots111}_{100\text{ 個 }1}\div 7$ 的餘數。求 β 的值。

If β is the reminder of $\underbrace{111\cdots111}_{100\text{ 1's}}\div 7$, determine the value of β .

2018 FG1.3

設 m 及 r 為非負整數。若 $f(7m + r) = r$，求 $q = f(2^{2018})$ 的值。

Let m and r be non-negative integers.

If $f(7m + r) = r$, determine the value of $q = f(2^{2018})$.

Answers

1992 HG5 5	2000 FI2.3 1	2008 FG2.2 6	2013 FI1.2 5	2015 FI2.2 5
2018 FG1.3 1				