1987 FI5.1

設
$$x = 19.\dot{8}\dot{7} \circ \dot{7} = \frac{a}{99}$$
 , 求 a 的值。(提示: $99x = 100 \ x - x$)

Let $x = 19.\dot{8}\dot{7}$. If $19.\dot{8}\dot{7} = \frac{a}{99}$, find the value of a. (Hint: $99x = 100 \ x - x$)

1988 FI5.1

若 $0.3\dot{5}\dot{7} = \frac{177}{a}$, 求 a 的值。If $0.3\dot{5}\dot{7} = \frac{177}{a}$, find the value of a.

1990 FG9.2

$$若 x = 1.9\dot{8}\dot{9}$$
,且 $x-1 = \frac{K}{99}$,求 K 的值。

If $x = 1.9\dot{8}\dot{9}$ and $x - 1 = \frac{K}{99}$, find the value of K.

1996 HI8

將 2.31 以分數表示。Express 2.31 as a fraction.

1998 FG2.1

若
$$\frac{137}{a}$$
 = $0.\dot{1}\dot{2}\dot{3}\dot{4}$,求 a 的值。If $\frac{137}{a}$ = $0.\dot{1}\dot{2}\dot{3}\dot{4}$, find the value of a .

1998 FG4.1

If $0.\dot{1} + 0.0\dot{2} + 0.00\dot{3} + ... + 0.00000000\dot{9} = a$, find the value of a.

(Give your answer in decimal)

1999 FG4.3

已知
$$m$$
, c 是小於 10 的正整數。若 $m=2c$,且 $0.\dot{m}\dot{c}=\frac{c+4}{m+5}$,求 c 之值。

Given that m, c are positive integers less than 10. If m = 2c and $0.\dot{m}\dot{c} = \frac{c+4}{m+5}$,

find the value of c.

2000 HI1

設
$$x = 0.17 + 0.017 + 0.0017 + \dots$$
 , 求 x 的值。

Let x = 0.17 + 0.017 + 0.0017 + ..., find the value of x.

2009 HI1

設
$$x = 0.23 + 0.0023 + 0.000023 + 0.00000023 + \cdots$$
,求 x 的值。

Let
$$x = 0.23 + 0.0023 + 0.000023 + 0.00000023 + ...$$
, find the value of x .

Answers

1987 FI5.1	1988 FI5.1	1990 FG9.2	1996 HI8 $2\frac{31}{99}$	1998 FG2.1
1968	495	98		1110
1998 FG4.1 0.13717421	1999 FG4.3 3	2000 HI1 170 891	2009 HI1 2300 9801	