1983 FI1.3

求 c 的值，若 $2^b = c^4$ 及 $c > 0$。

Find the value of c, if $2^{12} = c^4$ and $c > 0$.

1983 FI5.3

若 $pc^4 = 32$，$pc = b^2$ 及 c 為正數，c 的值為何？

If $pc^4 = 32$, $pc = (-2)^2$ and c is positive, what is the value of c?

1984 FSI.3

若 $8^b = c^{21}$，求 c 的值。If $8^7 = c^{21}$, find the value of c.

1984 FI1.2

若 $9^2 = 3^{4b}$，求 b 的值。If $9^2 = 3^{4b}$, find the value of b.

1984 FI4.3

若 $c^3 = 8^2$，求 c 的值。If $c^3 = 8^2$, find the value of c.

1985 FI1.4

若 $9^{d+2} = 6480 + 9^d$，求 d 的值。Find the value of d if $9^{d+2} = 6480 + 9^d$.

1986 FSI.3

若 $8^5 = 32^c$，求 c 的值。If $8^5 = 32^c$, find the value of c.

1986 FG7.4

若 $9^{p+2} = 240 + 9^p$，求 p 的值。If $9^{p+2} = 240 + 9^p$, find the value of p.

1987 FI2.2

若 $3^x + 3^{1-x} = 4$，且 $x > 0$，求 x 的值。If $3^x + 3^{1-x} = 4$ and $x > 0$,

find the value of x.

1987 FSG.2

若 $9^6 = 27^B$，求 B 的值。If $9^6 = 27^B$, find the value of B.

1988 FI2.3

若 $64^a = 2^{12}$，求 a 的值。If $64^a = 2^{12}$, find the value of a.

1988 FI4.4

若 w 是實數，且 $2^{2w} - 2^w - 2 = 0$，求 w 的值。

If w is a real number and $2^{2w} - 2^w - 2 = 0$, find the value of w.

1989 FSI.3

若 $27^6 = c^{18}$，求 c 的值。If $27^6 = c^{18}$, find the value of c.

1989 FI1.3

已知 $8^4 = 2^{c+2}$，求 c 的值。If $8^4 = 2^{c+2}$, find the value of c.

1990 HI2

若 $b < 0$ 及 $2^{2b+4} - 20 \times 2^b + 4 = 0$，求 b 的值。

If $b < 0$ and $2^{2b+4} - 20 \times 2^b + 4 = 0$, find the value of b.

1990 FI4.1

解下列 a 的方程 $2^{a+1} + 2^a + 2^{a-1} = 112$。

Solve the equation $2^{a+1} + 2^a + 2^{a-1} = 112$ in a.

1991 HI11

若 $a < 0$，且 $2^{2a+4} - 65 \times 2^a + 4 = 0$，求 a 的值。

If $a < 0$ and $2^{2a+4} - 65 \times 2^a + 4 = 0$, find the value of a.

1991 FI1.2

若 $rb = 15$，且 $br^4 = 125 \times 15$，其中 r 是整數，求 b 的值。

If $rb = 15$ and $br^4 = 125 \times 15$, where r is an integer, find the value of b.

1992 FSI.2

若 $2^{20} = B^{10}$ 且 $B > 0$，求 B 的值。If $2^{20} = B^{10}$ and $B > 0$, find the value of B.

1992 FI2.1

若 $ar = 24$ 及 $ar^4 = 3$，求 a 的值。If $ar = 24$ and $ar^4 = 3$, find the value of a.

1995 HI3

解 $3^{2x} + 9 = 10(3^x)$。Solve $3^{2x} + 9 = 10(3^x)$.

1996 HI1

已知 $4^{x-3} = 8^{x-2}$，求 x 的值。Find the value of x if $4^{x-3} = 8^{x-2}$.

1996 FI3.2

若 $3^2 \cdot 3^5 \cdot 3^8 \cdots 3^{3b-1} = 27^5$，求 b 的值。

Find the value of b if $3^2 \cdot 3^5 \cdot 3^8 \cdots 3^{3b-1} = 27^5$.

1996 FI3.4

若 $[(4^2)^2]^2 = 2^d$，求 d 的值。If $[(4^2)^2]^2 = 2^d$, find the value of d.

1996 FI4.2

若 $8^b = 4^{3.5} - 4^3$，求 b 的值。If $8^b = 4^{3.5} - 4^3$, find the value of b.

1999 FG2.2

若 $6^b + 6^{b+1} = 2^b + 2^{b+1} + 2^{b+2}$，求 b 之值。

If $6^b + 6^{b+1} = 2^b + 2^{b+1} + 2^{b+2}$, find the value of b.

2004 HG2

若 z 是方程 $6 \times 4^x - 13 \times 6^x + 6 \times 9^x = 0$ 的正數根，求 z 的值。

If z is the positive root of the equation $6 \times 4^x - 13 \times 6^x + 6 \times 9^x = 0$, find the value of z.

2005 FI3.1

已知 a 是方程 $2^{x+1} = 8^{\frac{1}{x} - \frac{1}{3}}$ 的正實數解，求 a 的值。

Given that a is a positive real root of the equation $2^{x+1} = 8^{\frac{1}{x} - \frac{1}{3}}$. Find the value of a.

2006 FG3.2

已知 $6^{x+y} = 36$ 及 $6^{x+5y} = 216$，求 x 的值。

Given that $6^{x+y} = 36$ and $6^{x+5y} = 216$, find the value of x.

2007 FI2.4

設 d 為方程 $cx^{\frac{2}{3}} - 8x^{\frac{1}{3}} + 4 = 0$ 的最小實根，求 d 的值。

Let d be the least real root of the $3x^{\frac{2}{3}} - 8x^{\frac{1}{3}} + 4 = 0$, find the value of d.

2009 HG7

已知 x 為實數且滿足 $2^{2x+8} + 1 = 32 \times 2^x$，求 x 的值。

Given that x is a real number and satisfies $2^{2x+8} + 1 = 32 \times 2^x$. Find the value of x.

2010 FG1.3

求方程 $(2^x - 4)^3 + (4^x - 2)^3 = (4^x + 2^x - 6)^3$ 的所有實根 x 的總和。

Find the sum of all real roots x of the equation $(2^x - 4)^3 + (4^x - 2)^3 = (4^x + 2^x - 6)^3$.

2018 HI5 2018 FG2.1

已知 $\dfrac{1 - 2^{-\frac{1}{x}}}{2^{-\frac{1}{x}} - 2^{-\frac{2}{x}}} = 4$。求 x 的值。 Given that $\dfrac{1 - 2^{-\frac{1}{x}}}{2^{-\frac{1}{x}} - 2^{-\frac{2}{x}}} = 4$. Find the value of x.

Answers

1983 FI1.3 8	1983 FI5.3 2	1984 FS1.3 2	1984 FI1.2 1	1984 FI4.3 4
1985 FI1.4 2	1986 FSI.3 3	1986 FG7.4 $\dfrac{1}{2}$	1987 FI2.2 1	1987 FSG.2 4
1988 FI2.3 2	1988 FI4.4 1	1989 FSI.3 3	1989 FI1.3 10	1990 HI2 -2
1990 FI4.1 5	1991 HI11 -4	1991 FI1.2 3	1992 FSI.2 4	1992 FI2.1 48
1995 HI3 0 or 2	1996 HI1 0	1996 FI3.2 3	1996 FI3.4 16	1996 FI4.2 2
1999 FG2.2 0	2004 HG2 1	2005 FI3.1 1	2006 FG3.2 $\dfrac{7}{4}$	2007 FI2.4 $\dfrac{8}{27}$
2009 HG7 -4	2010 FG1.3 3.5	2018 HI 5 2018 FG2.1 $\dfrac{1}{2}$		