1984 FI2.3

點 $A(5, c)$在直線 $2y = x + 15$ 上，求 c 的值。

The point $A(5, c)$ lies on the line $2y = x + 15$. Find the value of c.

1987 FI4.3

直線 $5x + 17y + 2 = d$ 過點 $(40, 5)$ 。求 d 的值。

The line $5x + 17y + 2 = d$ passes through (40, 5). Find the value of d.

1988 FG7.3

經過 $(4, 3)$ 及 $(12, -3)$的直線方程是$\frac{x}{a}+\frac{y}{b}=1$。求 a 的值。

The equation of the line through (4, 3) and (12, –3) is $\frac{x}{a}+\frac{y}{b}=1$.

Find the value of a.

1989 FI2.2

假設點 $(7, b)$ 在直線 $5x + 2y = 41$ 上。求 b 的值。

The point $(7, b)$ lies on the line $5x + 2y = 41$. Find the value of b.

1991 HI4

若方程 $2x + 3y + a = 0$ 及 $bx - 2y + 1 = 0$ 代表同一直線，求 $6(a + b)$ 的值。

If the equations $2x + 3y + a = 0$ and $bx – 2y + 1 = 0$ represent the same line, find the value of $6(a + b)$.

1997 FI1.3

若 $y = mx + c$ 的圖像經過 $(4, 5)$ 及 $(–2, 2)$ 兩點。求 c 的值。

Find the value of c so that the graph of $y = mx + c$ passes through the two points $(4, 5)$ and $(–2, 2)$.

2000 HI10

求直線 $3x – y – 4 = 0$ 與點 $(2, 2)$ 的最短距離。

Find the shortest distance between the line $3x – y – 4 = 0$ and the point $(2, 2)$.

2001 HI4

如果下列三條直線相交於一點，求 c 的值。

If the following three straight lines intersect at one point, find the value of c.

L_1: $6x + 6y – 19 = 0$

L_2: $18x + 12y + c = 0$

L_3: $2x + 3y – 8 = 0$

2003 FI4.2

已知三條直線 $4x + y = 4$，$mx + y = 0$ 和 $2x – 3my = 4$ 不能構成一個三角形。若 $m > 0$ 及 Q 是 m 的最小可能的值，求 Q 的值。

Given that the lines $4x + y = 4$, $mx + y = 0$ and $2x – 3my = 4$ cannot form a triangle. Suppose that $m > 0$ and Q is the minimum possible value of m, find the value of Q.

2004 FG2.4

若直線 $y = x + d$ 與 $x = –y + d$ 相交於點 $(d – 1, d)$，求 d 的值。

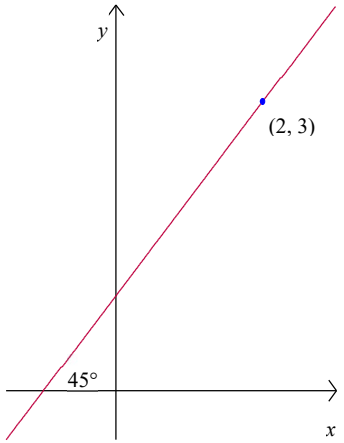
If the lines $y = x + d$ and $x = –y + d$ intersect at the point $(d – 1, d)$, find the value of d.

2007 FI1.2

如圖一，直線 ℓ 經過點(2, 3)並與 x 軸成 45°夾角。

若 ℓ 的方程是 $x + my + n = 0$ 及 $b = |1 + m + n|$，求 b 的值。

In Figure 1, the straight line ℓ passes though the point (2, 3), and makes an angle 45° with the x-axis. If the equation of ℓ is $x+my+n = 0$ and $b = |1+m+n|$, find the value of b.



2017 HG1

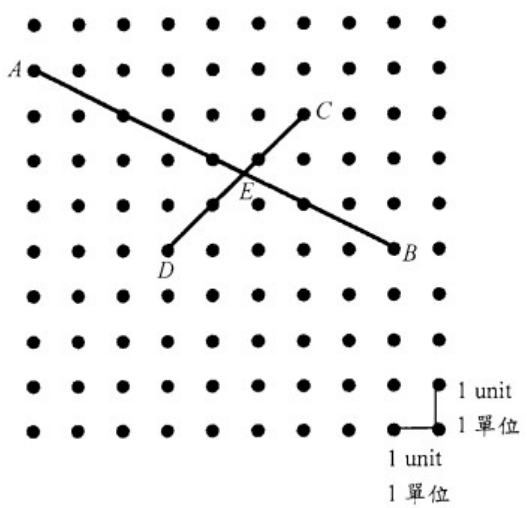
設 ΔABC 為一等腰直角三角形，頂點 A 及 B 的座標分別為 $(–2, 0)$ 及 $(18, 0)$，且 C 的座標是正數。當 ΔABC 的面積為最小時，求 C 的座標。

Suppose that ΔABC is an isosceles right-angled triangle with the coordinates of the vertices A and B as $(–2, 0)$ and $(18, 0)$, respectively, and the coordinates of C having positive values. Determine the coordinates of C when the area of ΔABC attains its minimum.

2019 HI7

在圖四中，AB 與 CD 相交於 E。設 AE 的長度為 q 單位，求 q 的值。

In Figure 4, AB and CE intersect at E. Let the length of AE be q units. Find the value of q .



圖四 Figure 4

2019 FI2.2

若直綫 $y = mx + B$ 經過兩點 $(4, 5)$ 和 $(-2, 2)$，求 B 的值。

If the straight line $y = mx + B$ passes through the two points $(4, 5)$ and $(-2, 2)$, determine the value of B .

Answers

1984 FI2.3 10	1987 FI4.3 287	1988 FG7.3 8	1989 FI2.2 3	1991 HI4 –17
1997 FI1.3 3	2000 HI10 0	2001 HI4 –47	2003 FI4.2 $\frac{2}{3}$	2004 FG2.4 1
2007 FI1.2 1	2017 HG1 (8, 10)	2019 HI7 $\frac{7\sqrt{5}}{3}$	2019 FI2.2 3	