Point of division (HKMO Classified Questions by topics)

### 1986 FG7.2

 $M \cdot N$  依次為(3,2)及(9,5)。若 P(s,t)為 MN 上一點使 MP: PN = 4:2,求 s 的值。

M, N are the points (3, 2) and (9, 5) respectively.

If P(s, t) is a point on MN such that MP : PN = 4 : 2, find the value of s.

### 1987 FI3.2

P , Q 之坐標依次為(a, 2)及(30, -6)。

若PQ的中點之座標為(18,b),求a的值。

The coordinates of the points P and Q are (a, 2) and (30, -6) respectively. If the coordinates of the mid-point of PQ is (18, b), find the value of a.

## 1989 HG5

A(2,3) 與 B(17,23) 的連綫交 
$$2x-y=7$$
 於  $P$ , 求  $\frac{AP}{PB}$  的值。

The line joining A(2, 3) and B(17, 23) meets the line 2x - y = 7 at P.

Find the value of  $\frac{AP}{PB}$ .

## 1989 FI4.3

M 及 N 依次是 (1, 2)、(11, 7) 兩點。P(a, b)是 MN 上一點使 MP: PN = 1: 4。求 a 的值。

M and N are the points (1, 2) and (11, 7) respectively. P(a, b) is a point on MN such that MP : PN = 1 : 4. Find the value of a.

## 1990 HG3

 $A \cdot B \cdot C$  及 D 的座標依次是 $(10,1) \cdot (1,7) \cdot (-2,1)$  及  $(1,3) \circ$ 

AB與CD相交於P。求 $\frac{AP}{PB}$ 的值。

The coordinates of A, B, C and D are (10, 1), (1, 7), (-2, 1) and (1, 3) respectively.

AB and CD meet at P. Find the value of  $\frac{AP}{PB}$ .

### 2007 HG4

已知點  $A \times B$  及 C 的坐標分別為  $(3,4) \times (6,-4)$  及  $(8,10) \circ$  M 及 N 分別為 AB 及 BC 的中點。X 為 AN 上一點使得  $AX: XN=2:1 \circ$  若  $r=\frac{CX}{XM}$ ,求 r 的值。

Given that the coordinates of the points A, B and C are (3, 4), (6, -4) and (8,10) respectively. M and N are the midpoints of AB and BC respectively. X is a point on AN such that AX: XN = 2: 1. If  $r = \frac{CX}{XM}$ , find the value of r.

# **Answers**

1986 FG7.2	1987 FI3.2	$\frac{1989 \text{ HG5}}{\frac{3}{2}}$	1989 FI4.3	1990 HG3
7	6		3	3
2007 HG4 2				