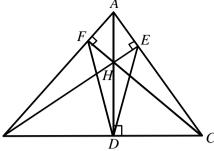
### Created by Mr. Francis Hung

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### 1989 FG9.1

圖中, $\angle BAC = 70^{\circ}$ ,且 $\angle FDE = x^{\circ}$ ,求x的值。

In the figure,  $\angle BAC = 70^{\circ}$  and  $\angle FDE = x^{\circ}$ . Find the value of x.

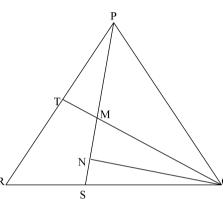


### 2000 HG6

如圖, $\Delta PQR$  為一等邊三角形,PT = RS;  $PS \cdot QT$  相交於 M; QN 垂直 PS 於 N。 設  $\angle QMN = x^{\circ}$ , 求 x 的值。

In the figure,  $\Delta PQR$  is an equilateral triangle, PT = RS; PS, QT meet at M; and QN is perpendicular to PS at N.

Let  $\angle QMN = x^{\circ}$ , find the value of x.

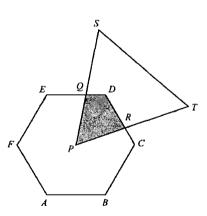


# 2009 HI7

在圖中,ABCDEF 是一正六邊形,其中心點是  $P \circ \Delta PST$  是一等邊三角形。已知 AB = 6 cm, QD = 2 cm 及 PT = 12 cm。若六邊形與三角形 的公共部分面積為  $c \text{ cm}^2$ ,求 c 的值。

In the figure, ABCDEF is a regular hexagon centred at the point P.  $\Delta PST$  is an equilateral triangle. It is given that AB = 6 cm, QD = 2 cm and PT = 12 cm. If the area of the common part of the hexagon and triangle is c cm<sup>2</sup>,

find the value of c.



### 2016 FI2.3

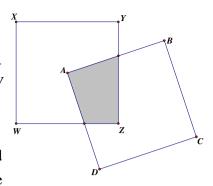
在下圖中,正方形 ABCD 及 XYZW 相等而且互相交疊使得頂點 A 位在 XYZW 的中心及 緩段 AB 將緩段 YZ 邊分為 1:2。若 XYZW 的面積與交疊部分的面積比率為 c:1,求 c 的值。

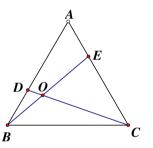
In the figure, identical squares ABCD and XYZW overlap each other in such a way that the vertex A is at the centre of XYZW and the line segment AB cuts line segment YZ into 1:2. If the ratio of the area of XYZW to the overlapped region is c:1, determine the value of c.

#### 2019 HI1

在圖一中,ABC 是一個等邊三角形。D 和 E 分別是 AB 和 AC 上的點,使得 AE = BD。若 CD 和 BE 相 交於 O 及  $\angle COE = y^{\circ}$ ,求 y 的值。

In Figure 1, ABC is an equilateral triangle. D and E are points on AB and AC respectively such that AE = BD. Id CD and BE intersect at O and  $\angle COE = y^{\circ}$ , find the value of y.





# **Created by Mr. Francis Hung**

Answers

1989 FG9.1	2000 HG6	2009 HI7	2016 FI2.3	2019 HI1
40	60	$9\sqrt{3}$	4	60

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