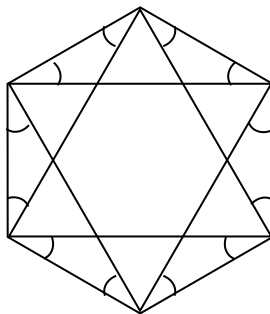


1982 FI5.1

如圖，所有有記號的角的總和是 a° ，求 a 的值。

Let the sum of the marked angles be a° .

Find the value of a .



1983 FI1.2

一正 b -邊形的內角和是 1800° 。求 b 的值。

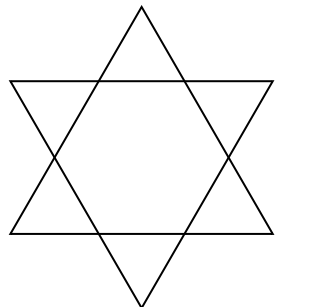
The sum of the interior angles of a regular b -sided polygon is 1800° .

Find the value of b .

1983 FG10.2

一正 N -邊形的邊向外延長形成一個“星形”。如果該星形的每一隻角均為 108° ，求 N 的值。(例如，由正 6 邊形形成的 6 角星如右圖所示。)

The sides of an N -sided regular polygon are produced to form a “star”. If the angle at each point of that “star” is 108° , find the value of N . (For example, the “star” of a six-sided polygon is given as shown in the diagram.)



6-sided regular polygon

1984 FSI.2 1989 FSI.2

一正 b 邊形之內角和為 900° ，求 b 的值。

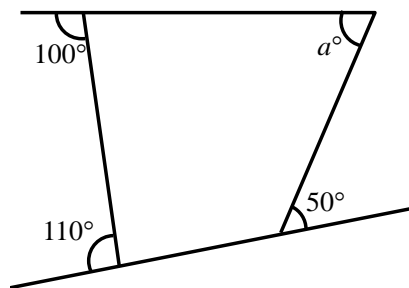
The sum of the interior angles of a regular b -sided polygon is 900° .

Find the value of b .

1984 FI5.1

如圖，求 a 的值。

In the figure, find the value of a .



1984 FI5.4

正 10 邊形之每一內角為 x° 。求 x 的值。

Each interior angle of a 10-sided regular polygon is x° . Find the value of x .

1985 FG9.4

若一凸 20 邊形之內角和為 x° ，求 x 的值。

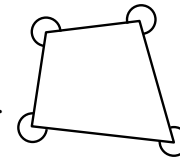
If the sum of the interior angles of a 20-sided convex polygon is x° , find the value of x .

1986 FSI.1

附圖所示四角之和為 a° ，求 a 的值。

In the given figure, the sum of the four marked angles is a° .

Find the value of a .



1986 FSI.2

一正 b 邊形之內角和為 1080° ，求 b 的值。

The sum of the interior angles of a regular b -sided polygon is 1080° .

Find the value of b .

1987 FG6.3 1997 FI4.1

一正 N 邊形之每一內角為 140° 。求 N 的值。

Each interior angle of an N -sided regular polygon is 140° . Find the value of N .

1988 FG10.1

一正 n 邊形每一內角是 160° 。求 n 的值。

Each interior angle of an n -sided regular polygon is 160° . Find the value of n .

1989 HI3 1997 HG6

若一正多邊形的某內角較其外角大的 150° ，求該正多邊形邊的數目。

Find the number of sides of a regular polygon if an interior angle exceeds an exterior angle by 150° .

1989 HG2

一凸 n 邊形的一個內角是 x° ，其他內角的和是 800° ，求 n 的值。

An interior angle of an n -sided convex polygon is x° while the sum of other interior angles is 800° . Find the value of n .

1989 FI5.3

一正 n 邊形的每一內角是 150° 。求 n 的值。

Each interior angle of an n -sided regular polygon is 150° . Find the value of n .

1990 FI2.4

正 12 邊形的每一內角為 m° 。求 m 的值。

Each interior angle of a regular polygon of 12 sides is m° . Find the value of m .

1990 FG10.3-4

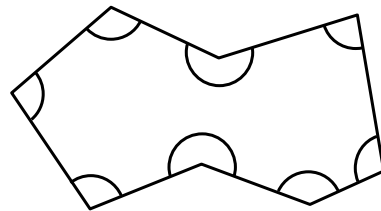
一凸 n 邊形其中一內角為 x° ，而其餘內角之和為 2180° 。求 x 及 n 的值。

One interior angle of a convex n -sided polygon is x° . The sum of the remaining interior angles is 2180° . Find the values of x and n .

1991 FI5.1

在圖中，若多邊形之內角和是 a° ，求 a 的值。

In the figure, if the sum of the interior angles is a° , find the value of a .

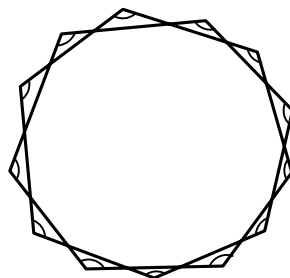


1992 HI13

右圖是延長一個 13 邊形的邊所構成的圖形。若圖中標示的角的和是 n° ，求 n 的值。

Figure 4 shows a figure obtained by producing the sides of a 13-sided polygon.

If the sum of the marked angles is n° , find the value of n .



1992 HG3

一凸 n 邊形的一個內角是 x° ，其餘各內角之和等於 2468° ，求 x 的值。

An interior angle of an n -sided convex polygon is x° .

The sum of the other interior angles is 2468° . Find the value of x .

1992 FI1.1

若一凸 n 邊形之內角和為 1440° ，求 n 的值。

If the sum of the interior angles of an n -sided polygon is 1440° , find the value of n .

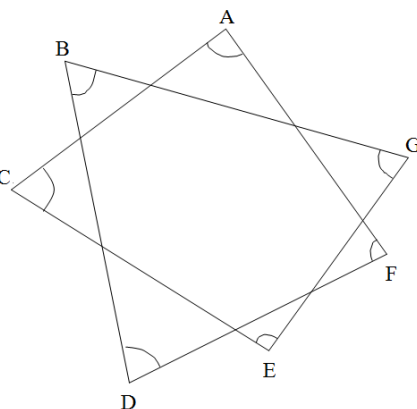
2000 HI5

如圖，設

$$\angle A + \angle B + \angle C + \angle D + \angle E + \angle F + \angle G = x^\circ$$

，求 x 的值。

In the figure, let $\angle A + \angle B + \angle C + \angle D + \angle E + \angle F + \angle G = x^\circ$, find the value of x .



2002 FI3.4

一個凸多邊形，除了內角 A 以外，其他內角的和是 2460° 。

若 $\angle A = S^\circ$ ，求 S 的值。

In a convex polygon, other than the interior angle A , the sum of all the remaining interior angles is equal to 2460° . If $\angle A = S^\circ$, find the value of S .

2006 FI1.3

一個正 C 邊形的一隻內角是 144° ，求 C 的值。

An interior angle of a regular C -sided polygon is 144° , find the value of C .

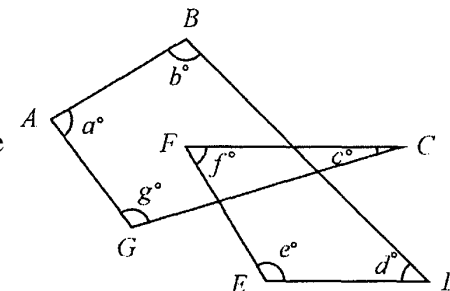
2008 FG2.1

如圖， BD 、 FC 、 GC 及 FE 為直線。

若 $z = a + b + c + d + e + f + g$ ，求 z 的值。

In the figure, BD , FC , GC and FE are straight lines.

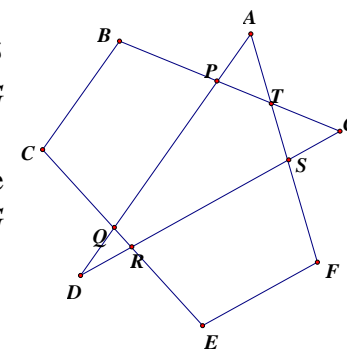
If $z = a + b + c + d + e + f + g$, find the value of z .



2012 FG3.2

在圖一中， AD 、 DG 、 GB 、 BC 、 CE 、 EF 及 FA 都是直線綫段。若 $\angle FAD + \angle GBC + \angle BCE + \angle ADG + \angle CEF + \angle AFE + \angle DGB = r^\circ$ ，求 r 的值。

In Figure 1, AD , DG , GB , BC , CE , EF and FA are line segments. If $\angle FAD + \angle GBC + \angle BCE + \angle ADG + \angle CEF + \angle AFE + \angle DGB = r^\circ$, find the value of r .



2013 HI6

從一個有 n 條邊的凸多邊形中，選取其中一隻內角。

若餘下的 $n - 1$ 隻內角之和是 2013° ，求 n 的值。

In a convex polygon with n sides, one interior angle is selected.

If the sum of the remaining $n - 1$ interior angles is 2013° , find the value of n .

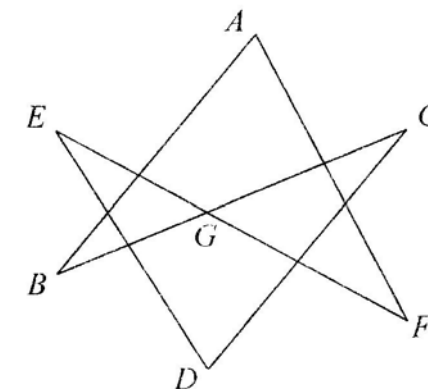
2015 HI4

已知右圖中， $\angle EGB = 64^\circ$ ，

$$\angle A + \angle B + \angle C + \angle D + \angle E + \angle F = ?$$

As shown in the figure, $\angle EGB = 64^\circ$,

$$\angle A + \angle B + \angle C + \angle D + \angle E + \angle F = ?$$



Answers

1982 FI5.1 360	1983 FI1.2 12	1983 FG10.2 10	1984FSI.2 1989FSI.2 7	1984 FI5.1 80
1984 FI5.4 144	1985 FG9.4 3240	1986 FSI.1 1080	1986 FSI.2 8	1987FG6.3 1997FI4.1 9
1988 FG10.1 18	1989HI3 1997HG6 24	1989 HG2 7	1989 FI5.3 12	1990 FI2.4 150
1990 FG10.3-4 $x = 160, n = 15$	1991 FI5.1 1080	1992 HI13 1620	1992 HG3 52	1992 FI1.1 10
2000 HI5 540	2002 FI3.4 60	2006 FI1.3 10	2008 FG2.1 540	2012 FG3.2 540
2013 HI6 14	2015 HI4 232°			