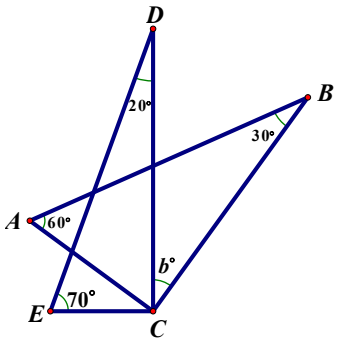
1982 FI5.2

若 $\angle ACE = 36°$。求 b 的值。

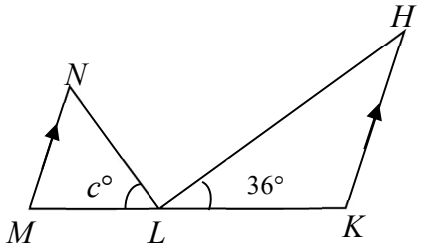
If $\angle ACE = 36°$. Find the value of b .



1982 FI5.3

若 $HK = KL$，$LM = MN$，$HK//MN$，求 c 的值。

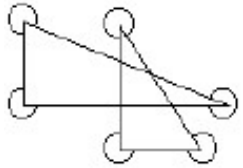
If $HK = KL$, $LM = MN$, HK // MN, find the value of c .



1983 FI1.1

如圖，所有有記號的角的總和是 $a°$，求 a 的值。

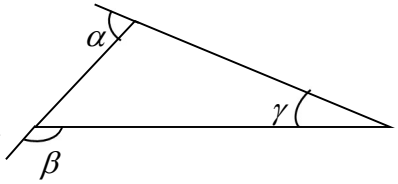
In the following figure, the sum of the marked angles is $a°$, find the value of a .



1983 FG6.2

α 與 β 的平均值是 105°，α、β 與 γ 的平均值是 $b°$。求 b 的值。

The average of α and β is 105°, the average of α, β and γ is $b°$. Find the value of b .



1984 FSI.1 1987 FSG.3 1989 FSI.1

附圖所示三角之和為 $a°$，求 a 的值。

In the given diagram, the sum of the three marked angles is $a°$. Find the value of a .

1984 FG7.1 1987 FG7.1

凌晨三點卅分，時鐘兩針間之銳角為 $p°$，求 p 的值。

The acute angle between the 2 hands of a clock at 3:30 a.m. is $p°$. Find the value of p .

1985 FI2.2

在圖中，$AC = CD$，$\angle CAB - \angle ABC = 30°$。

若 $\angle BAD = b°$，求 b 的值。

In the figure, $AC = CD$ and $\angle CAB - \angle ABC = 30°$.

If $\angle BAD = b°$, find the value of b .

C D A B

1985 FI3.1

在二時十五分，時鐘兩針所構成之銳角為 $\left(18\frac{1}{2}+a\right)^\circ$，求 a 的值。

The acute angle formed by the hands of a clock at 2:15 is $\left(18\frac{1}{2}+a\right)^\circ$.

Find the value of a .

1987 FI3.1

如圖所示，求 x 的值。

In the figure, find the value of x .

$(2x + 10)°$

$(x + 20)°$ $2x°$

1988 FG6.1

附圖中 $\angle B$ 及 $\angle C$ 的平分線相交於 I。

若 $\angle A = 70°$，$\angle BIC = x°$，求 x 的值。

In the figure, the bisectors of $\angle B$ and $\angle C$ meet at I.

If $\angle A = 70°$ and $\angle BIC = x°$, find the value of x .

A I B C

1989 FI1.1

在十時三十分，時鐘兩針構成的鈍角是 $(100 + a)°$，求 a 的值。

The obtuse angle formed by the hands of a clock at 10:30 is $(100 + a)°$.

Find the value of a .

1989 FI5.1

如圖所示，求 a 的值。

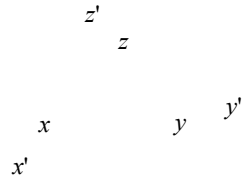
In the figure, find the value of a .

30° $a°$ 45° 40° 35°

1990 HI16

圖一的三角形的三個外角的比是 $x' : y' : z' = 4 : 5 : 6$，而三個內角的比是 $x : y : z = a : b : 3$，求 b 的值。

In figure 1, the exterior angles of the triangle are in the ratio $x' : y' : z' = 4 : 5 : 6$ and the interior angles are in the ratio $x : y : z = a : b : 3$. Find the value of b .



1990 FG6.3

若在四時十五分，時鐘兩針之間的銳角是 $k°$，求 k 的值。

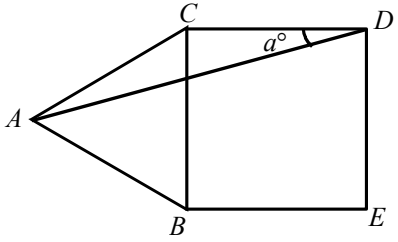
If the acute angle formed by the hands of a clock at 4:15 is $k°$, find the value of k .

1991 FI1.1 2014 FG3.3

如圖所示，ABC 是等邊三角形，$BCDE$ 是正方形。若 $\angle ADC = a°$，求 a 的值。

In the figure, ABC is an equilateral triangle and $BCDE$ is a square.

If $\angle ADC = a°$, find the value of a .

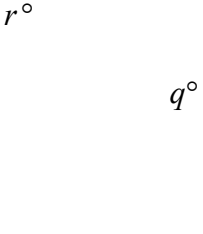


1991 FG6.4

圖中，p 與 q 的平均值是 125。求 r 的值。

In the figure, the average of p and q is 125 .

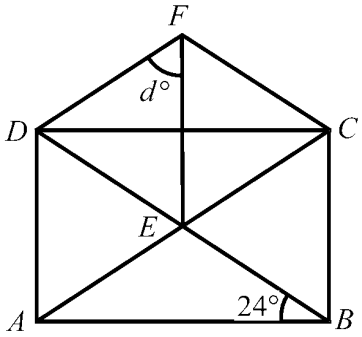
Find the value of r .



1993 FI4.4

$ABCD$ 為一長方形及 CEF 為一等邊三角形，$\angle ABD = 24°$，求 d 的值。

$ABCD$ is a rectangle and CEF is an equilateral triangle, $\angle ABD = 24°$, find the value of d .

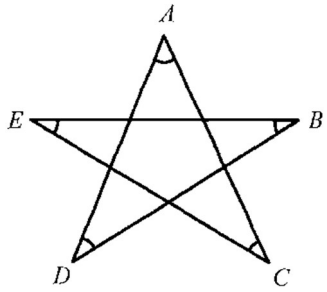


1997 FG1.1

圖中，$\angle A + \angle B + \angle C + \angle D + \angle E = a°$。求 a 的值。

In the given diagram ,

$\angle A + \angle B + \angle C + \angle D + \angle E = a°$, find the value of a.



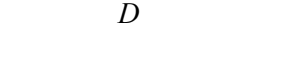
1998 HG2

在圖一，ABC 是一三角形，外角 A 和 B 的角平分綫 AD 和 BE 分別交 CB 和 AC 的延綫於 D 和 E。設 $AD = BE = AB$ 和 $\angle BAC = a°$，求 a 的值。

In Figure 1, ABC is a triangle. AD and BE are the bisectors of the exterior angles A and B respectively meeting CB and AC produced at D and E .

Let $AD = BE = AB$ and $\angle BAC = a°$.

Find the value of a.

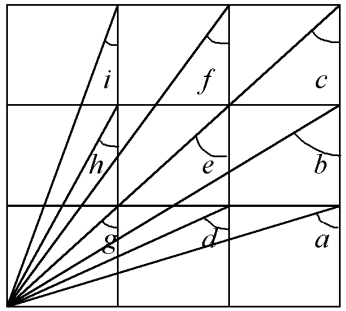


1999 HI4

在圖二，有一個 3×3 正方形。設 $\angle a + \angle b + \ldots + \angle i = X°$，求 X 的數值。

In Figure 2, there is a 3×3 square.

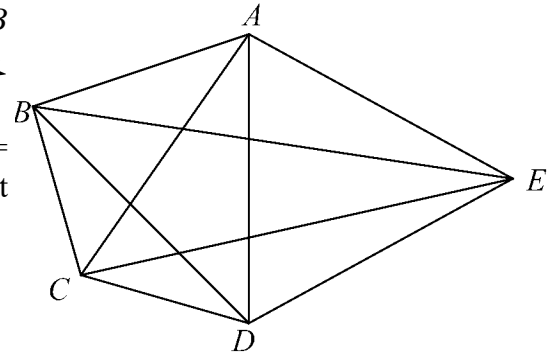
Let $\angle a + \angle b + \ldots + \angle i = X°$, find the value of X .



2002 FG1.3

在右圖中，$AC = AD = AE = ED = DB$ 及 $\angle BEC = c°$。已知 $\angle BDC = 26°$ 及 $\angle ADB = 46°$，求 c 的值。

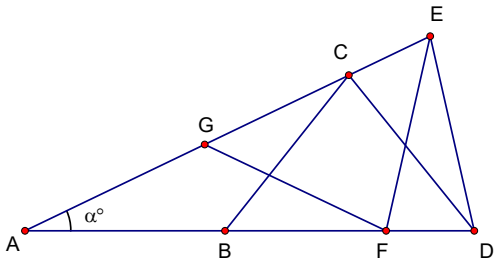
In the figure, $AC = AD = AE = ED = DB$ and $\angle BEC = c°$. Given that $\angle BDC = 26°$ and $\angle ADB = 46°$, find the value of c .



2003 FG4.1

如圖，AE 、AD 是直綫且 $AB = BC = CD = DE = EF = FG = GA$。若 $\angle DAE = \alpha°$，求 α 的值。

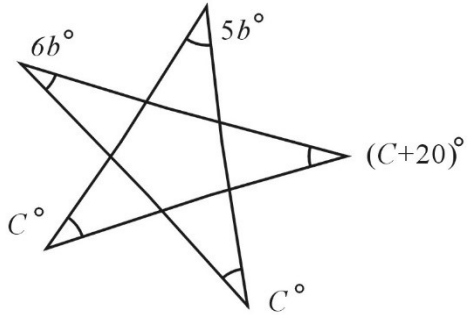
In the figure, AE and AD are two straight lines and $AB = BC = CD = DE = EF = FG = GA$. If $\angle DAE = \alpha°$, find the value of α .



2005 FI2.3

如圖，$b = 5$，求 C 的值。

In the figure, $b = 5$, find the value of C.



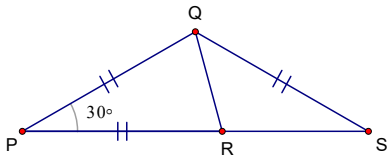
2006 FG2.1

如圖， PRS 是一直綫， $PQ = PR = QS$ 及 $\angle QPR = 30°$。

若 $\angle RQS = w°$，求 w 的值。

In the figure, PRS is a straight line, $PQ = PR = QS$ and $\angle QPR = 30°$.

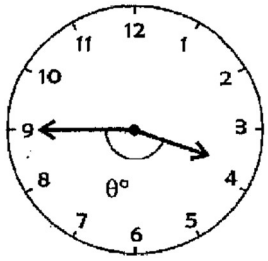
If $\angle RQS = w°$, find the value of w .



2007 HI1

如圖一，時鐘顯示着三時四十五分。若時針與分針的交角是 θ°，求 θ 的值。

In Figure 1, a clock indicates the time 3:45. If the angle between the hour-hand and the minute-hand is θ°, find the value of θ .

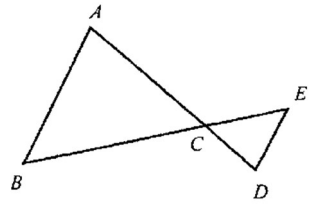


2009 FI1.2

如圖，AD 及 BE 為直綫且 $AB = AC$ 及 $AB // ED$。若 $\angle ABC = 30°$ 及 $\angle ADE = S°$，求 S 的值。

In the figure, AD and BE are straight lines with $AB = AC$ and $AB // ED$.

If $\angle ABC = 30°$ and $\angle ADE = S°$, find the value of S .



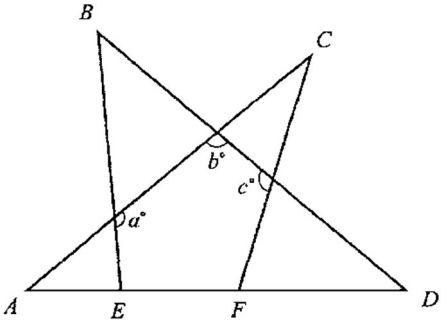
2009 FG4.3

如圖，AC、AD、BD、BE 及 CF 為直綫。

若 $\angle A + \angle B + \angle C + \angle D = 140°$

及 $a + b + c = S$，求 S 的值。

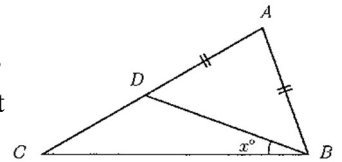
In the figure, AC, AD, BD, BE and CF are straight lines. If $\angle A + \angle B + \angle C + \angle D = 140°$ and $a + b + c = S$, find the value of S .



2010 HG3

在圖中，ABC 是一三角形。D 是 AC 上的一點，使得 $AB = AD$。若 $\angle ABC - \angle ACB = 40°$，求 x 的值。

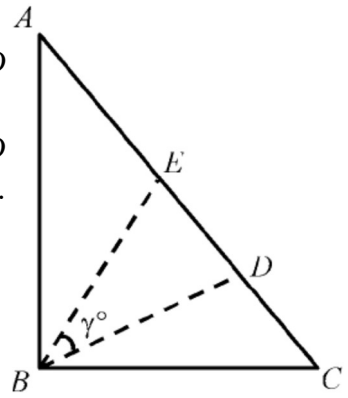
In the figure , ABC is a triangle. D is a point on AC such that $AB = AD$. If $\angle ABC - \angle ACB = 40°$, find the value of x .



2014 FI3.2

在右圖的三角形 ABC 中，$\angle ABC = 90°$，$AB = AD$ 及 $CB = CE$。設 $\gamma° = \angle DBE$，求 γ 的值。

In the figure, triangle ABC has $\angle ABC = 90°$, $AB = AD$ and $CB = CE$. If $\gamma° = \angle DBE$, determine the value of γ.



2015 HG6

已知三角形中兩角之和為 $n°$，最大角比最小角大 30°，求 n 的最大值。

Given that the sum of two interior angles of a triangle is $n°$, and the largest interior angle is 30° greater than the smallest one.

Find the largest possible value of n .

Answers

1982 FI5.2 36	1982 FI5.3 54	1983 FI1.1 1800	1983 FG6.2 80	1984FSI.1 1987FSG.3 900
1984FG7.1 1987FG7.1 75	1985 FI2.2 15	1985 FI3.1 4	1987 FI3.1 30	1988 FG6.1 125
1989 FI1.1 35	1989 FI5.1 30	1990 HI6 5	1990 FG6.3 37.5	1991 FI1.1 2014 FG3.3 15
1991 FG6.4 70	1993 FI4.4 54	1997 FG1.1 180	1998 HG2 12	1999 HI4 405
2002 FG1.3 19	2003 FG4.1 $\frac{180}{7}$	2005 FI2.3 35	2006 FG2.1 45	2007 HI1 157.5
2009 FI1.2 120	2009 FG4.3 320	2010 HG3 20	2014 FI3.2 45	2015 HG6 140