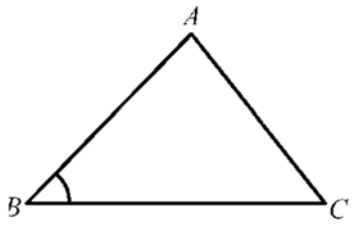
1985 FI5.3



在圖中，$\angle ABC = 30°$，且 $AC = 45$ cm。若ΔABC之外接圓半徑為 v cm，求 v 的值。

In the Figure, $\angle ABC = 30°$ and $AC = 45$ cm .
If the radius of the circumcircle of ΔABC is v cm , find the value of v .

1989 HI10

在某三角形中，各內角正弦的比是 3 : 4 : 5。若 A 是這個三角形的最小內角，且 $\tan A = \frac{x}{16}$，求 x 的值。

The sines of the three angles of a triangle are in the ratio 3 : 4 : 5. If A is the smallest interior angle of the triangle and $\tan A = \frac{x}{16}$, find the value of x .

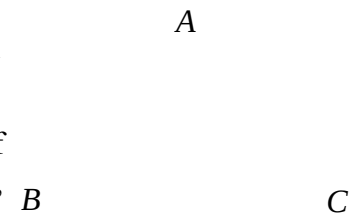
1990 HI6

某三角形各內角正弦的比為 3 : 4 : 5。

若 A 為該三角形的最小內角，且 $\cos A = \frac{x}{5}$，求 x 的值。

The sines of the angles of a triangle are in the ratio 3 : 4 : 5. If A is the smallest interior angle of the triangle and $\cos A = \frac{x}{5}$, find the value of x .

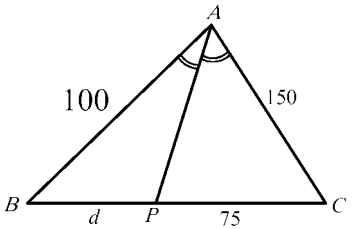
1991 HI19



在圖中，$AB = AC = 6$ cm 及 $BC = 9.6$ cm。若 ΔABC 的外接圓的直徑是 x cm，求 x 的值。

In the figure, $AB = AC = 6$ cm and $BC = 9.6$ cm. If the diameter of the circumcircle of ΔABC is x cm, find the value of x .

1993 FI2.4



圖中 AP 等分 $\angle BAC$。已知 $AB = 100$，$BP = d$，$PC = 75$ 及 $AC = 150$，求 d 的值。

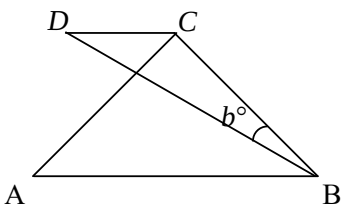
In the figure, AP bisects $\angle BAC$. Given that $AB = 100$, $BP = d$, $PC = 75$ and $AC = 150$, find the value of d .

1998 FG3.1

在ΔABC 中，$\angle ABC = 2\angle ACB$，$BC = 2AB$。若$\angle BAC = a^o$，求 a 的值。

In ΔABC, $\angle ABC = 2\angle ACB$, $BC = 2AB$. If $\angle BAC = a^o$, find the value of a .

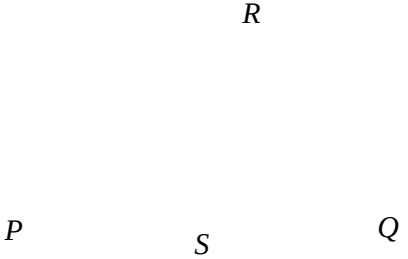
1999 FG1.2



在圖一，AB 平行於 DC，$\angle ACB$ 為一直角，$AC = CB$ 及 $AB = BD$.，若$\angle CBD = b°$，求 b 之值。

In the figure, AB is parallel to DC, $\angle ACB$ is a right angle, $AC = CB$ and $AB = BD$.
If $\angle CBD = b°$, find the value of b .

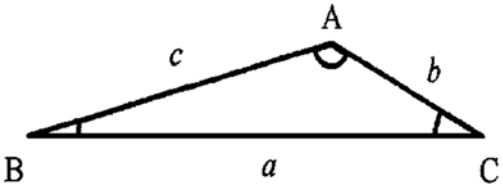
2001 HG8



如圖中，PQR 是一個三角形，S 是 PQ 上的中點，$RQ = PS = SQ$，且$\angle RQS = 2\angle RPS$.。設$\angle PSR = x°$，求 x 的值。

In the figure, PQR is a triangle, S is the mid-point of PQ, $RQ = PS = SQ$, and $\angle RQS = 2\angle RPS$. Let $\angle PSR = x°$, find the value of x .

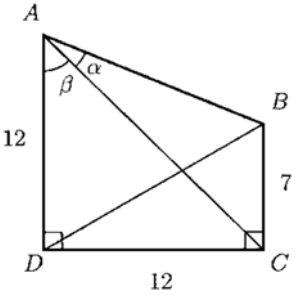
2003 HG3



圖中， $\angle A : \angle B : \angle C = 3 : 2 : 1$，$a : b : c = 2 : k : 1$，求 k 的值。

In the figure, $\angle A : \angle B : \angle C = 3 : 2 : 1$, $a : b : c = 2 : k : 1$, find the value of k .

2010 HI7



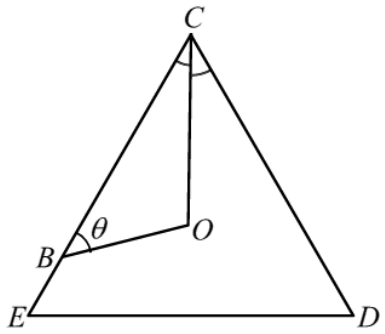
在圖一中，$ABCD$ 是一梯形。AD、BC 和 DC 的長分別為 12、7 和 12。若 DC 分別垂直於 AD 及 BC，求 $\frac{\sin\alpha}{\sin\beta}$ 的值。

In the figure, $ABCD$ is a trapezium. The lengths of segments AD, BC and DC are 12, 7 and 12 respectively. If segments AD and BC are both perpendicular to DC, find the value of $\frac{\sin\alpha}{\sin\beta}$.

2019 FI4.1

ΔCDE 為一個等邊三角形。點 O 在 ΔCDE 內。若點 B 在 CE 上，$\theta = \angle CBO$，OC 為 $\angle DCE$ 的角平分綫，以及 $OC : OB = 5 : 4$，求 $\alpha = \sin\theta$ 的值。

ΔCDE is an equilateral triangle. Point O is inside ΔCDE. If point B lies on CE, $\theta = \angle CBO$, $\angle DCE$ is bisected by OC, and $OC : OB = 5 : 4$, determine the value of $\alpha = \sin\theta$.



2024 HI12

若 ΔABC 的邊長為 9、10 及 17，求 ΔABC 外接圓的半徑。

If the lengths of the three sides of a ΔABC are 9, 10 and 17, find the radius of the circum-circle of ΔABC.

Answers

1985 FI5.3 45	1989 HI10 12	1990 HI6 4	1991 HI19 10	1993 FI2.4 50
1998 FG3.1 90	1999 FG1.2 15	2001 HG8 120	2003 HG3 $\sqrt{3}$	2010 HI7 $\frac{7}{13}$
2019 FI4.1 $\frac{5}{8}$	2024 HI12 $\frac{85}{8}$			