1985 FI5.4

在圖二中，ΔPAB 由切於圓之三切線形成，
且 O 為圓心，若$\angle APB=40°$，且$\angle AOB = w°$，
求 w 的值。

In Figure 2, ΔPAB is formed by the 3 tangents
of the circle with centre O. If $\angle APB = 40°$ and
$\angle AOB = w°$, find the value of w.
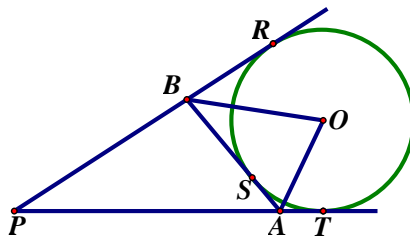
1985 FG9.2

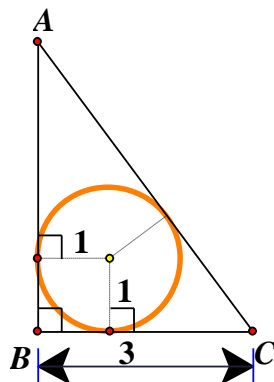ΔLMN 之三邊長分別為 8、15 及 17。若ΔLMN 之內接圓之半徑為 r，求 r 的
值。

The lengths of the 3 sides of ΔLMN are 8, 15 and 17 respectively.
If r is the length of the radius of the circle inscribed in ΔLMN, find the value of r .

1989 HG9

在圖中，$\angle B = 90°$、$BC = 3$，且 ΔABC 的內切圓
半徑長 1 單位，求 AC 的長度。

In the figure, $\angle B = 90°$, $BC = 3$ and the radius of the
inscribed circle of ΔABC is 1. Find the length of AC .

1995 FI4.1
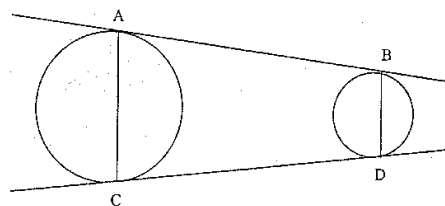
在三角形 ABC 中，$\angle B = 90°$，$BC = 7$
且 $AB = 24$。若 r 為內切圓之半徑，求 r 的值。

In triangle ABC, $\angle B = 90°$, $BC = 7$ and $AB = 24$.
If r is the radius of the inscribed circle,
find the value of r .

1998 FGS.1

在圖中，有兩外公切線，此外公切線與圓
相交於點 A、B、C 及 D。若 $AC = 9$ cm，
$BD = 3$ cm，$\angle BAC = 60°$及 $AB = s$ cm，
求 s 的值。

In the figure, there are two common tangents. These common tangents meet the
circles at points A, B, C and D. If $AC = 9$ cm, $BD = 3$ cm, $\angle BAC = 60°$ and
$AB = s$ cm, find the value of s .

2011 HG10

如圖，$AC = 3$，$BC = 4$ 及 $\angle C = 90°$。M 是
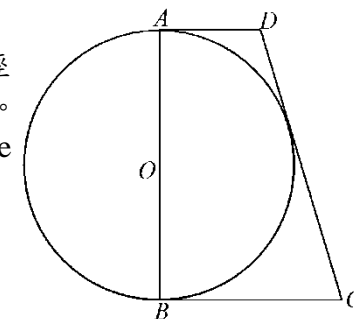BC 上的一點使得ΔABM 及 ΔACM 的內
切圓的半徑相等。求 AM 的長。

As shown in the figure, $AC = 3$, $BC = 4$ and
$\angle C = 90°$. M is a point on BC such that the
radii of the incircles in ΔABM and ΔACM are
equal. Find the length of AM .
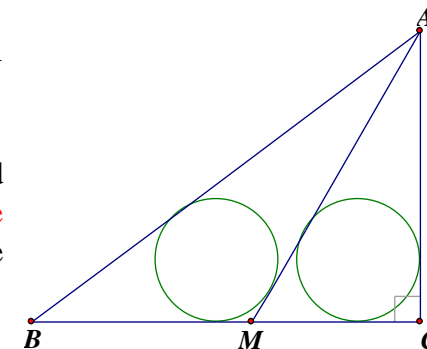
2013 FG3.4

在圖中，AD、BC 和 CD 是以 O 作圓心且直徑
$AB = 12$ 的圓的切線。若 $AD = 4$，求 BC 的值。

In the figure, AD, BC and CD are tangents to the
circle with centre at O and diameter $AB = 12$.
If $AD = 4$, find the value of BC .

2019 HI12

在三角形 ABC 中，$AB = 14$、$BC = 48$ 及 $AC = 50$。將 P 及 Q 分別記為ΔABC
的內心及外心。設 PQ 的長度為 d 單位。求 d 的值。

In triangle ABC, $AB = 14$, $BC = 48$ and $AC = 50$. Denote the in-centre and
circumcentre of ΔABC by P and Q respectively. Let the length of PQ be d units.
Find the value of d .

Answers

1985 FI5.4	1985 FG9.2	1989 HG9	1995 FI4.1	1998 FGS.1
70	3	5	3	6
2011 HG10	2013 FG3.4	2019 HI5		
$2\sqrt{3}$	9	26		