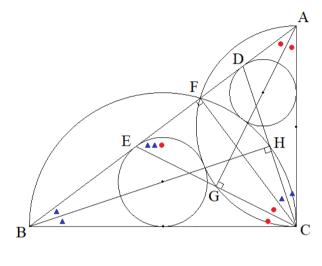
● 第384回〈追加〉問題解答〈三角定規〉



図のように点F, G, H を定める。 図において.

$$\triangle$$
 ECF \triangle \triangle AEG \triangle \triangle \triangle AEG

$$\angle$$
 CFE = \angle AGE = \angle R (::1)

$$∴$$
 \triangle ECF $∽$ \triangle AEG (2 角相等)

$$\therefore$$
 \angle ECF = \angle EAG = (1/2) \angle A (\bullet \circlearrowleft) ... $\textcircled{3}$

$$\triangle$$
 DCF $\ge \triangle$ DBH において

$$\angle DFC = \angle DHB = \angle R \ (\because \textcircled{2})$$

$$\angle CDF = \angle BDH$$
 (共有)

$$\therefore$$
 \angle DCF = \angle DBH = $(1/2)$ \angle B (\blacktriangle FI) \cdots (4)

$$\angle A + \angle B = \angle R (\bullet \bullet \blacktriangle)$$
 だから

$$\angle$$
 DCE = \angle DCF + \angle ECF = (1/2) (\angle A + \angle B) = **45**° (\bullet ^\(\text{\left}) (\text{: 34})

[証明了]