

<解> PART23

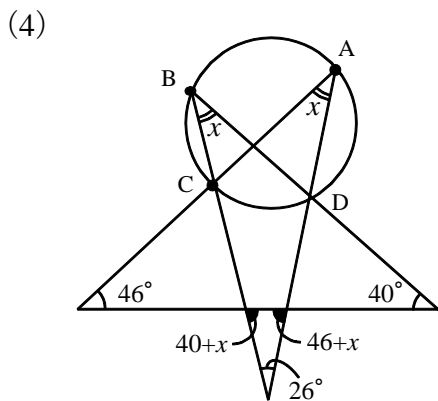
$$\begin{aligned}
 (1) \text{ (与式)} &= \frac{4-\sqrt{3}+4\sqrt{3}-3}{2} - \frac{\sqrt{3}}{3} \\
 &= \frac{1+3\sqrt{3}}{2} - \frac{\sqrt{3}}{3} \\
 &= \frac{3+9\sqrt{3}-2\sqrt{3}}{6} \\
 &= \frac{3+7\sqrt{3}}{6}
 \end{aligned}$$

$$\begin{aligned}
 (2) \quad x+y=A \text{ とおくと、} \\
 \text{(与式)} &= (A+1)^2 - A - 7 \\
 &= A^2 + A - 6 \\
 &= (A-2)(A+3) \\
 &= \underline{(x+y-2)(x+y+3)}
 \end{aligned}$$

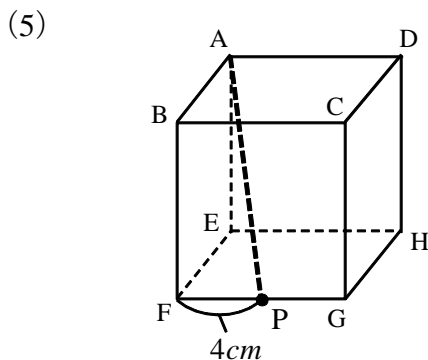
(3)

	1	2	3	4	5	6
1	1	2	3	4	5	⑥
2	2	4	⑥	8	10	⑫
(小) 3	3	⑥	9	⑫	15	⑮
4	4	8	⑫	16	20	⑳
5	5	10	15	20	25	㉓
6	⑥	⑫	⑮	㉒	㉒	㉒

$$\frac{15}{36} = \frac{5}{12}$$



$$\begin{aligned}
 40+x+26+46+x &= 180 \\
 x &= 34^\circ
 \end{aligned}$$



AP は、3 辺の長さがそれぞれ 4cm、8cm、8cm の直方体の対角線の長さと等しいので、

$$\begin{aligned}
 AP &= \sqrt{4^2 + 8^2 + 8^2} \\
 &= \sqrt{144} \\
 &= \underline{12cm}
 \end{aligned}$$