

<解>PART25

$$\begin{aligned}
 (1) \text{ (与式)} &= \{(a+2b)+(a-2b)\}\{(a+2b)-(a-2b)\} \\
 &= 2a \times 4b \\
 &= \underline{8ab}
 \end{aligned}$$

$$\begin{aligned}
 (2) \text{ (与式)} &= \frac{2\sqrt{7}}{7} + \frac{2\sqrt{5} \times \sqrt{5} \times \sqrt{7}}{14} \\
 &= \frac{2\sqrt{7}}{7} + \frac{5\sqrt{7}}{7} \\
 &= \underline{\sqrt{7}}
 \end{aligned}$$

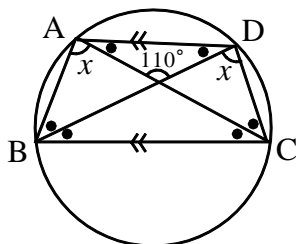
$$\begin{aligned}
 (3) \quad &x^2 + 2xy + y^2 + 3x + 3y + 2 \\
 &= (x+y)^2 + 3(x+y) + 2 \\
 &\quad (x+y=Aとおくと) \\
 &= A^2 + 3A + 2 \\
 &= (A+1)(A+2) \\
 &= \underline{(x+y+1)(x+y+2)}
 \end{aligned}$$

$$\begin{aligned}
 (4) \quad &6 < \sqrt{2n} < 7 \\
 &36 < 2n < 49 \\
 &18 < n < \frac{49}{2} = 24.5 \\
 &\text{これを満たす } n \text{ は、19、20、21、22、23、24 の } \underline{6 \text{ 個}}
 \end{aligned}$$

$$\begin{aligned}
 (5) \quad &2 \text{ つの解が } -1 \text{ と } 5 \text{ より、} \\
 &x^2 + ax + b = (x+1)(x-5) \\
 &\quad = x^2 - 4x - 5 \\
 &\text{よって、 } \underline{a=-4、b=-5}
 \end{aligned}$$

$$(6) \quad 25a - 9a = 8 \text{ より、 } \underline{a = \frac{1}{2}}$$

(7)



$$\begin{aligned}
 \bullet &= (180 - 110) \div 2 = 35^\circ \\
 x &= 180 - 35 \times 3 \\
 &= \underline{75^\circ}
 \end{aligned}$$