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$R = \rho \frac{l}{S}$ より、 (抵抗率の式)

$$R = 5.487 \Omega, \quad l = 1.00 \times 10^3 \text{ m}$$

$$S = \pi(1.00 \times 10^{-3})^2 \text{ m}^2 = 3.14 \times 10^{-6} \text{ m}^2$$

を代入して、

$$5.487 = \rho \frac{1.00 \times 10^3}{3.14 \times 10^{-6}}$$

$$\therefore \rho = 1.72 \times 10^{-8} \Omega \cdot \text{m}$$