

$$\textcircled{3} \int \frac{\sqrt{1+\ln x}}{x} dx = \left| \begin{array}{l} 1+\ln x = A \\ \frac{1}{x} dx = dA \end{array} \right| =$$

$$= \int \sqrt{A} dA = \int A^{\frac{1}{2}} dA = \frac{A^{\frac{3}{2}}}{\frac{3}{2}} = \underline{\underline{\frac{2}{3} (1+\ln x)^{\frac{3}{2}} + c}}$$

$$= \underline{\underline{\frac{2}{3} (1+\ln x) \cdot \sqrt{1+\ln x} + c}}$$