

(公式 3.2 (8))

$$\begin{aligned} I &= \int \frac{x+1}{x^2+2x+2} dx - \int \frac{1}{x^2+2x+2} dx \\ &= \frac{1}{2} \int \frac{2(x+1)}{x^2+2x+2} dx - \int \frac{1}{(x+1)^2+1} dx \\ &= \frac{1}{2} \log |x^2+2x+2| - \tan^{-1}(x+1) + C \end{aligned}$$