

104. Let $u = e^x + e^{-x}$, $du = (e^x - e^{-x}) dx$.

$$\begin{aligned} \int \frac{2e^x - 2e^{-x}}{(e^x + e^{-x})^2} dx &= 2 \int (e^x + e^{-x})^{-2} (e^x - e^{-x}) dx \\ &= \frac{-2}{e^x + e^{-x}} + C \end{aligned}$$