

$$\begin{aligned} (8) \quad & \left(\frac{e^x + 1}{e^x - 1} \right)' \\ &= \frac{(e^x + 1)'(e^x - 1) - (e^x + 1)(e^x - 1)'}{(e^x - 1)^2} \\ &= \frac{-2e^x}{(e^x - 1)^2} \end{aligned}$$