

$$5) \int \frac{2e^x - 2e^{-x}}{(e^x + e^{-x})^2} dx \quad \begin{array}{l} u = e^x + e^{-x} \\ du = e^x - e^{-x} dx \end{array}$$

$$2 \int \frac{1}{u^2} du = 2 \cdot -u^{-1} + C$$
$$= \frac{-2}{e^x + e^{-x}} + C$$

6) Equation of tangent line to $f(x) = e^{3x} \cdot \ln x$ at $(1, 0)$.

$$f'(x) = e^{3x} \cdot \frac{1}{x} + \ln x \cdot 3e^{3x}$$

$$f'(1) = e^3 + \frac{\ln 1 \cdot 3e^3}{0}$$

$$f'(1) = e^3$$

$$y = e^3(x-1)$$