

$$1) \int \frac{\sigma w(lux)}{x} dx = \int \frac{1}{x} \cdot \sigma w(lux) dx =$$

$$= \int (lux)' \sigma w(lux) dx =$$

$$= \int [MH(lux)]' dx =$$

$$= MH(lux) + C.$$

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 $\frac{d}{dx}$ siva ru i'du.

$$2) \int x^2 \cdot e^{2x^3+1} dx = \int \frac{6x^2}{6} \cdot (e^{2x^3+1}) dx =$$

$$= \frac{1}{6} \int 6x^2 \cdot e^{2x^3+1} dx =$$

$$= \frac{1}{6} \int (2x^3+1)' \cdot e^{2x^3+1} dx =$$

$$= \frac{1}{6} \cdot e^{2x^3+1} + C.$$

$$3) \int \frac{1}{\sqrt[3]{x-1}} dx = \int \frac{1}{(x-1)^{1/3}} dx =$$

$$= \int (x-1)^{-1/3} dx = \int \left(\frac{(x-1)^{-1/3+1}}{-1/3+1} \right)' dx =$$

$$= \int \left(\frac{(x-1)^{2/3}}{2/3} \right)' dx = \frac{3}{2} \cdot \sqrt[3]{(x-1)^2} + C.$$

$$4) \int x^3 \cdot MH(x^4) dx =$$

$$= \int \frac{x^4}{4} \cdot MH(x^4) dx = \frac{1}{4} \int x^4 \cdot MH(x^4) dx =$$

$$= -\frac{1}{4} \cdot \sigma w(x^4) + C$$

$$5) \int \frac{1}{e^x-1} dx = \int \frac{1-e^x+e^x}{e^x-1} dx =$$

$$= \int \frac{-(e^x-1)+e^x}{e^x-1} dx = \int -\frac{(e^x-1)}{e^x-1} + \frac{e^x}{e^x-1} dx =$$

$$= \int -1 + \frac{e^x}{e^x-1} dx = -\int dx + \int \frac{e^x}{e^x-1} dx =$$

$$= -x + \ln(e^x-1) + C.$$