

$$c) \int x^y dx = \begin{cases} \frac{x^{y+1}}{y+1} + c(y) & , y \neq -1 \\ \ln|x| + c(y) & y = -1 \end{cases}$$

$$d) \int x^y dy = \frac{x^y}{\ln x} + c(x)$$

$x > 0$

$$\int 2^y dy = \frac{2^y}{\ln 2} + c_1$$

$$\int 3^y dy = \frac{3^y}{\ln 3} + c_2$$

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