

いろいろな関数の導関数

$$(x^a)' \quad (a \text{ は実数})$$

$$(\sin x)'$$

$$(\cos x)'$$

$$(\tan x)'$$

$$(\text{Sin}^{-1}x)'$$

$$(\text{Cos}^{-1}x)'$$

$$(\text{Tan}^{-1}x)'$$

$$(e^x)'$$

$$(e^{ax})'$$

$$(a^x)'$$

$$(\log x)'$$

$$(\log |x|)'$$

$$(\log_a x)'$$

$$(x^a)' = ax^{a-1} \quad (a \text{ は実数})$$

$$(\sin x)' = \cos x$$

$$(\cos x)' = -\sin x$$

$$(\tan x)' = \frac{1}{\cos^2 x}$$

$$(\text{Sin}^{-1}x)' = \frac{1}{\sqrt{1-x^2}}$$

$$(\text{Cos}^{-1}x)' = \frac{-1}{\sqrt{1-x^2}}$$

$$(\text{Tan}^{-1}x)' = \frac{1}{1+x^2}$$

$$(e^x)' = e^x$$

$$(e^{ax})' = ae^{ax}$$

$$(a^x)' = a^x \log a$$

$$(\log x)' = \frac{1}{x}$$

$$(\log |x|)' = \frac{1}{x}$$

$$(\log_a x)' = \frac{1}{x \log a}$$