

**1** <微分公式>

①  $(\sin x)' = \boxed{\cos x}$

②  $(\cos x)' = \boxed{-\sin x}$

③  $(\tan x)' = \boxed{\frac{1}{\cos^2 x}}$

④  $(\log x)' = \boxed{\frac{1}{x}}$

⑤  $(\log_a x)' = \boxed{\frac{1}{x \log a}}$

⑥  $(e^x)' = \boxed{e^x}$

⑦  $(a^x)' = \boxed{a^x \log a}$

<積分公式>  $C$ は積分定数

①  $\int \sin x dx = \boxed{-\cos x + C}$

②  $\int \cos x dx = \boxed{\sin x + C}$

③  $\int \frac{1}{\cos^2 x} dx = \boxed{\tan x + C}$

④  $\int \frac{1}{\sin^2 x} dx = \boxed{-\frac{1}{\tan x} + C}$

⑤  $\int \frac{1}{x} dx = \boxed{\log |x| + C}$

⑥  $\int e^x dx = \boxed{e^x + C}$

⑦  $\int a^x dx = \boxed{\frac{a^x}{\log a} + C}$